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ABSTRACT

This manual on general education and common learning was prepared by and for the Dallas County Community College District's (DCCCD's) Committees for Common Learning (CCL's), which have been charged with reviewing the DCCCD's general education curriculum and degree requirements and making recommendations concerning common learning requirements and standards of student performance. After explaining the history and rationale of the DCCCD's Common Learning Project, the manual presents the responsibilities of the campus and districtwide CCL's and an administrative timetable. The next sections define key curriculum-related terms, present general education models used at four colleges, and discuss extracurricular activities as a vehicle for common learning. Following a review of socioeconomic trends and societal changes and their implications for general education, the manual presents a model for implementing and overcoming resistance to change. The last two sections consider the parameters to the DCCCD's curriculum revision set by Texas state agencies and regulations, and review potential obstacles to implementing a revised general education curriculum. Appendices contain: (1) a list of CCL members; (2) "Skills for Living," a guide for revising the general education curriculum; (3) current DCCCD degree requirements; (4) information on general education in occupational curricula; (5) data on DCCCD faculty and students; and (6) "Avoiding the Potholes: 43 Strategies for Reforming General Education, a paper by Jerry Gaff which reviews common problems faced by curriculum reform committees. (DAB)

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COMMITTEE HANDBOOK FOR COMMON LEARNING

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INTRODUCTION

This handbook was prepared for the college Committees on Common Learning by their committee chairs, who make up the DCCCD Committee for Common Learning. Throughout the fall semester of 1981, the DCCCD Committee met together each Friday afternoon to learn more about the task that lay ahead. Each committee member prepared a presentation for the group on a topic related to general education or curriculum change. Slowly, surely, the committee members began to develop a greater comprehension of their work. The prevailing attitude transformed from confusion to recognititon of the significant challenges that awaited the college committees.

While it was physically impossible for each college committee member to be a part of this intensive learning process, the committee chairs wanted their colleagues to benefit from the wealth of information which had been accumulated. They also wanted the college committees to have a clear understanding of what they were to do. Thus this handbook was born. A brief summary of each of the DCCCD Common Learning committee sessions is included here, as are sections which describe the background of the common learning effort in the DCCCD. Committee chairs also developed questions which amplify and clarify the charges given to the committee. The appendices contain resource documents which proved particularly helpful, as well as membership lists of each of the college committees. A supplement describing some basic aspects of curriculum design has also been prepared.

In a seven-college district, the possibilities for confusion and misunderstanding about a project like Common Learning are incalculable. This handbook will not eliminate such confusion, but we hope it will reduce it. Throughout the life of the Common Learning project, the college committee chairs will meet together to share ideas, exchange notes, and resolve differences so that the end result of this endeavor will be a recommendation for common learning in the DCCCD that builds fully upon the knowledge and talent of its faculty and staff.

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A BRIEF HISTORY OF COMMON LEARNING IN THE DCCCD

The term "common learning" is new to the DCCCD, but the ideas which propel the project are not. In the fall of 1977, the college vice presidents of instruction and the vice chancellor of academic affairs launched a district-wide project to identify exit competencies for a number of transferable courses. The impetus behind this effort was concern that common DCCCD courses, with common descriptions, numbers and credits, should build upon a core of common outcomes. At this time, one college was assigned the task of developing a broader set of values, skills, and attitudes that could be described as general education goals. These goals were called "Skills for Living." (See Appendix B.)

The "competency project," despite its noble intentions, was ill-fated from the outset. Faculty were concerned about a robot-like standardization of courses; administrators were uncertain about the level of specificity the competencies should have; the timeline was too short; the problems multiplied. When the dust settled, competencies had indeed been developed for each of the assigned courses. But one course had twelve competencies; another had one hundred and twelve. Clearly the assignment had been understood in wondrous and differing ways. The competencies were quietly shelved.

One aspect of the project, however, would not go away. "Skills for Living," developed by an interedisciplinary group of faculty and staff, seemed to have some value that went beyond the competency project. "Skills for Living" were designed to give specific form to the basic

purpose of the Dallas County Community College District, which is "to help students equip themselves for effective living and for responsible citizenship in a rapidly changing local, state, national and world community." Staff members from throughout the DCCCD had the opportunity to review "Skills for Living," and support for the goals was widespread. Indeed, many of them were already being addressed. But the problem remained: how could "Skills for Living" be organized and incorporated into a student's educational experience?

In a typical organizational response, a new committee was formed. The Educational Outcomes Committee was responsible for organizing a series of community forums in which community leaders were invited to join faculty and staff in a critique of the "Skills for Living" goals. Were the goals appropriate for community college students in Dallas, Texas? Did community members support these general education goals? The answer was a resounding "Yes." But that led to another question: just how do you propose to accomplish the formidable task of acquainting students with these "Skills for Living," much less helping them achieve competence in these areas?

As the Educational Outcomes Committee explored this question, it became clear that an examination of the curriculum, and specifically of the degree requirements, was the place to start. It also became clear that faculty should have the primary role in any such examination. Thus was born the idea of the Committees for Common Learning, predominantly faculty groups from each campus.

Rationale

Essentially, the Committees for Common Learning have been asked to undertake a major curriculum review and possible curriculum revision.

The obvious questions is, why bother? Are students or faculty complaining about the curriculum? Are employers or other colleges indicating that there are problems with DCCCD degree requirements? Is the administration just trying to shake things up, or is this a guise for some yet-to-be-determined cost-cutting measure? The answer to all of the above is "No." Then, why?

A significant reason for reviewing DCCCD degree requirements is that it has never been done. Since the degree requirements first went into the El Centro catalog in 1966, they have undergone little or no change. Meanwhile, there have been technological revolutions, significant shifts in the student population, curriculum modifications throughout higher education, social evolutions, growing criticism of public education, and other changes too numerous to list. But the core curriculum of this dynamic, responsive community college has gone essentially unexamined by its faculty. It is past time for such a critical review.

Another compelling reason to examine common learning in the DCCCD is to determine what learning, if any, should be common to occupational and academic transfer students. For a number of years, these two student groups have been aimed in divergent curriculum directions. Within the realm of academic transfer, the degree requirements are the same for all students (see Appendix C). For occupational students, however, there is little semblance of any common core of learning (see Appendix D). This pattern, too, calls for comprehensive faculty examination. It has emerged, in part, because of a curriculum development process which has allowed occupational curricula to go unexamined by faculty outside the occupational area. The time for a broader review is here.

The most abstract reason is perhaps also the most important one. General education is undergoing a national revival because of

widespread belief that in this period of rapid change, fragmentation and self-absorption have become compelling problems. At a time when we desperately need a sense of the "connectedness of things," we find ourselves increasingly overspecialized and compartmentalized. Ernest Boyer and Arthur Levine say it well: The agenda for common learning "is those experiences, relationships, and ethical concerns that are common to all of us simply by virtue of our membership in the human family at a particular moment in history. General education is an institutional affirmation of society's claim on its members." They quote Dr. Lewis Thomas, saying "if this century does not slip forever through our fingers it will be because learning will have directed us away from our splintered dumbness and will have helped us focus on our common goals." This, they add, "is both the purpose and the urgency of general education."[1]

Simply put, we must examine our degree requirements as a statement of our beliefs about common learning because we owe it to our students to do so. If we cannot develop a curriculum which integrates the essential elements of "Skills for Living," we can hardly expect students to provide such integration for themselves. If we agree that common learning is important, then we, as professional educators, must provide a means to achieve it.

1. Ernest L. Boyer and Arthur Levine, "A Quest for Common Learning." Change, April 1981, 28-35.

CHARGE TO COLLEGE COMMITTEES FOR COMMON LEARNING

The seven college Committees for Common Learning will be working during 1982 and 1983 to review common learning requirements in the DCCCD and to make recommendations for changes in such requirements that may be needed. Throughout this process, the chairs of the college committees will meet together for progress reports and coordination.

The charges to the college committees follow, along with specific questions that may be helpful in pursuing these tasks.

1. Make recommendations for required common learning for DCCCD students.

   A. What common learning is now required of DCCCD students? Is common learning required of some students, but not of others?

   B. What is our responsibility as faculty to carry out the district's educational outcome goals (Skills for Living)?

   C. How many of these goals are already being fulfilled? For how many and which students?

   D. How should we change what we do to expand that coverage?

   E. Can all outcome goals be met by a graduate? If not, which goals are essential?

   F. Are we responsible for acquisition of the skills or for presenting the opportunity to get the skills?

   G. Should there be common learning for A.A.S., A.A.A.S. and/or all DCCCD students? What are the pros and cons of such commonality?

   H. Should common learning be defined in terms of courses? skills? objectives? What form should the recommendations for common learning take?

   I. Should there be a common core of learning for all occupational programs? What about one-year programs?

J. Should the core of common learning be based primarily on discipline content, on "Skills for Living," on the process of learning, or on some combination of these elements? What about an interdisciplinary approach?

K. Does (or should) common learning go beyond the classroom? If so, how should it be organized, if at all? Can outcome goals be met outside of the curriculum? If so, are we satisfied with the voluntary nature of extra curricular learning of essential skills for living?

2. Make recommendations for implementing identified common learning requirements. (Address both A.A.S. and A.A.A.S. degree requirements.)

A. If new courses are required, how will they be designed? Who will design them? Who will teach them? What costs in course development or staff development are anticipated?

B. Should there be any community review of the common learning requirements? If so, how?

C. Can the existing course structure accommodate the identified common learning requirements?

D. If common learning is to be a part of existing courses, how can students or staff know that the essential common learning requirements are being met?

E. What vehicles other than credit courses could be used for implementing identified common learning requirements?

F. How will students be affected by the recommended changes? How much control can we exercise over what students take?

G. How will the present staff and structure be affected by the recommendations?

H. Do the recommendations leave room for individuality and creativity, or are they uncompromisingly rigid?

I. How will the effectiveness of the recommended changes be evaluated

3. Explore areas where standards of student performance might be appropriate. Recommend a program for implementing standards of student performance in the identified areas.

The district-wide committee will amplify this charge during Spring Semester, 1982.

Timetable

Selection of College Committee Chairs	September 1, 1981
Seminars on Common Learning for Chairs	Fall Semester, 1981
Selection of College Committees	December 1, 1981
Discussion at Conference Day	February 18, 1982
College Interim Reports to District Committee	May 1, 1982
College Recommendations to District Committee	January 15, 1983
Presentation of District Common Learning Recommendations to Faculty	April 1, 1983
District Committee Recommendations to VPI's	May 15, 1983
Action for Inclusion in 1984-85 Catalog	Fall, 1983

DEFINITIONS

In approaching discussions of curriculum, we frequently lack common definitions of key terms. This absence of agreed upon meaning constitutes an obstacle to productive discourse. The terms below are often used interchangeably, but for the purpose of avoiding semantical disagreements, we offer the following broad definitions.

General Education

What has been meant historically by the term "general education" has been quite varied and often contradictory. There is, as Jerry Gaff has pointed out, no "single model of effective general education."[1] However, perhaps defining what general education is not will help to sharpen the focus. It is not specialized career or vocational training nor is it an individualized academic major. While it is often thought of as those required and elective liberal arts courses distributed in the curriculum outside the major, this is generally considered a weak since it lacks specific goals or outcomes and consistent development and supervision, and usually is diverse and not common to all students.

General education is, then, by definition, general (in that it is not specific). It is that body of knowledge, skills, understandings, values, etc. that an institution identifies as sufficiently important to require all students to commonly acquire. The college committees will, in fact, be defining what general education will be in the DCCCD.

Common Learning

In their book, A Quest for Common Learning: The Aims of General

Education, Ernest L. Boyer and Arthur Levine use the term "common learning" to define more precisely their vision of what general education ought to be today. General education, they propose, should ". . . concern itself with those shared experiences without which human relationships are diminished, common bonds are weakened, and the quality of life is reduced . . . . It should concentrate on those experiences that knit isolated individuals into a community."[2] Hence, common learning is that which all students should come to understand as shared with others. General education, or common learning, emphasizes the "connectedness" of things and transcends the limitations of individual disciplines.

Core Curriculum

A core curriculum is that group of courses or educational experiencies which all students are required to complete. It implies that there are some things of such importance that all students should know them and that they should learn them in a prescribed sequence and manner. This approach contrasts with a system of distribution requirements in which students are required to select, say, six hours of science or humanities from a list of available courses. At the opposite extreme, some colleges have no required courses or areas. The core curriculum, it should be noted, lends itself to the purposes of general education.

Liberal Arts Education

Sydney French has commented that "In general education we bend the subject matter to the needs of the student; in liberal arts education we bend the student to the subject." Liberal arts education emphasizes the disciplines, while general education may utilize the methods and content of the disciplines in an integrated way to achieve general education or common learning outcomes. Liberal arts in content and

facets is broader than general education in that it refers to all the disciplines of the fine and communicative arts and the social and behavioral sciences. It is more specific in that it encourages deeper investigation into specialized academic areas.

Liberal Education

The term "liberal education" is also often erroneously confused with general education. It might be said that "liberal education" is the broad, overall outcome of a liberal arts education. It would, say, be distinguished from an education provided largely by a professional area such as Business. It would be distinguished from "general education" in that the latter refers to a limited portion of the curriculum common to all students.

1. Jerry G. Gaff, "Historical and Contemporary Perspectives," General Education: Issues and Resources, ed. Jerry G. Gaff, et.al. (Washington, D.C.: Association of American Colleges, 1980), p. 23.

2. Ernest L. Boyer and Arthur Levine, A Quest of Common Learning: The Aims of General Education (Washington, D.C.: The Carnegie Foundation for the Advancement of Teaching), p. 35.

GENERAL EDUCATION MODELS

Schools which install common learning programs have done so according to a variety of models. These models reflect each institution's thinking about the goals of a general education curriculum and about the structure for achieving those goals. They can help us identify some of the alternatives that have been selected by similar and very different colleges and universities. A few of these models are briefly described below.

Harvard

Harvard's faculty voted to establish a core curriculum requirement in five areas: Literature and the Arts, History, Social Analysis and Moral Reasoning, Science, and Foreign Cultures. The core program has ten course requirements normally equivalent to one year of work. Specifically required are one half-course (one semester) in literature and one half-course in fine arts or music, and one half-course in humanistic culture. Historical studies include a half-course, broad in scope, dealing with the late nineteenth and the twentieth centuries. Also required is a half-course concerned with some of the affairs that once divided people but no longer do.

The Harvard program also includes one half-course such as economics, anthropology, psychology, and government. A half-course in ethics, law, and politics satisfies the requirement in the third area, Social Analysis and Moral Reasoning.

Two half-courses include the study of a major Western culture and the use of the language of that culture, and another half-course devoted to a study of other major cultures, texts being read in translation. Students may also study one or two more half-courses in Foreign Cultures.

Science requirements are two half-courses treating basic scientific concepts and findings.

Comprising "non-concentration" requirements are writing, foreign language, and mathematics. Expository writing instruction is linked with courses in the core curriculum. Assessment of writing skills is provided during the freshman orientation. Students with writing deficiencies are required to attend a remedial, non-credit course during the fall, before they can enroll in a credit course. Mathematics requirements are designed to show the student how to apply theoretical knowledge, since too many students cannot use what they know in new concepts.

Community College of Denver

The Community College of Denver grants four degrees, in which the general education program varies. All degree-seeking students take twelve hours in the core curriculum, one three-hour course each in communications, computation, personal/interpersonal development, and critical thinking/decision making. All these are college level and not remedial.

Students in all transfer degree plans take 15 credit hours, one three-hour course each in arts and humanities, communications, science and mathematics, social science, and college computation. At least one interdisciplinary course is required of transfer students. This type

of course is designed to connect diverse disciplines.

Catonsville Community College

Catonsville Community College in Maryland, whose students are all commuters, has a common learning program with 27 credit hours--of 60 required for a degree--divided into five components: six hours in composition; three hours in "numerical studies"; two in life fitness; six hours in interdisciplinary core courses; and ten hours in limited distribution courses: four in natural world, three in groups and institutions, and three in human values. No developmental or remedial courses apply to these requirements.

The two interdisciplinary courses expose students to new ways to learn. One course examines the gathering and evaluating of evidence by major theorists in natural and social sciences. The other course deals with the artists who construct verbal and non-verbal images.

Miami-Dade Community College

The faculty of Miami-Dade Community College worked for a half-dozen years on its common learning program, the rationale for such a program, and the goals for a program that would "develop and integrate every student's knowledge, skills, attitudes, and experiences so that the student can engage effectively in a lifelong process of inquiry and decision making."

At Miami-Dade, all students are assessed on admission. Those with basic skills deficiencies are counseled to enroll in remedial/developmental courses.

To receive the Associate in Arts Degree, all students must accumulate a total of 62 credit hours. Common Learning credits total 36; Physical Education/Health Maintenance hours total 2. The Common Learning

credits fall into three categories: Common Learning Core--15 credits; Distribution Courses--15 credits; and Elective Courses--6 credits.

All students must complete the common core courses--five courses directed toward the majority of the program's goals--Communications, Humanities, Social Environment, Natural Environment, and Individual Growth and Development.

Common Learning distribution groups--Communications, Humanities, Social Sciences, and Natural Sciences--offer up to 25 courses (including three interdisciplinary courses), of which the A.A. student must complete five.

The remaining six credits are selected from any instructional area, including Arts and Sciences and the occupational and technical divisions, so long as these courses address several Common Learning goals. (See chart following.)

Miami-Dade students seeking the Associate in Science Degree must complete a minimum of 62 credits. The Common Learning requirement is the core with one alternative: Students may take the health maintenance course in place of Individual Growth and Development. Substitution of more specialized courses for Common Learning core courses is not allowed.

Any college or university earnestly working on a common learning curriculum will find many examples being offered or proposed. Because each school or district is unique, instructional and administrative staffs must develop programs fitting the needs of their communities.

MIAMI-DADE COMMUNITY COLLEGE
GENERAL EDUCATION REQUIREMENTS FOR THE ASSOCIATE IN ARTS DEGREE

BASIC SKILLS				
MATH COMPETENCY (Required for Graduation)		READING & WRITING COMPETENCY (Required for the Core Communications Course)		
GENERAL EDUCATION CORE				
COMMUNICATIONS	HUMANITIES	SOCIAL ENVIRONMENT	NATURAL ENVIRONMENT	THE INDIVIDUAL
Required Single, multi-disciplinary courses -- 15 credits				
DISTRIBUTION GROUPS				
COMMUNICATIONS	HUMANITIES	SOCIAL SCIENCES	NATURAL SCIENCES	PHYSICAL EDUCATION
English Composition Creative Writing* Introduction to Literature* Speech*	Art Drama Foreign Language Literature Music Philosophy Interdisciplinary Humanities	Anthropology Economics Geography History Political Science Psychology Sociology Interdisciplinary Social Sciences	Biology Chemistry Earth Sciences Mathematics Physics Interdisciplinary Natural Sciences	Physical Activities Health Maintenance
3 credits *Can be selected only if English Composition competencies have been met.	Four courses, including at least one from each of these three groups, are required -- 12 credits. Each campus will designate a short list of courses for each group; the discipline areas listed here are only illustrative.			2 credits (These credits are not included in the 36-credit general education requirement.)
ELECTIVES 6 credits -- selected from a collegewide list.				

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BEYOND THE CURRICULUM

Educators agree that significant value changes occur during the educational experience of college students. An increase in open-mindedness, tolerance for ambiguity, cultural and intellectual interests, and positive self-image are only a few of the frequently-cited changes. Recognizing that these changes do take place, and assuming that they are desirable, we should examine the elements of college life which cause them to happen. College courses doubtlessly contribute to the change process, but, to paraphrase John Henry Cardinal Newman, real education also takes place beyond the curriculum.

Most community colleges provide an extensive array of extracurricular activities. Student development activities, intramural athletics, theatrical, musical, and artistic productions, community service functions, workshops, seminars, etc., provide opportunities for a broad educational experience.

However, many obstacles prevent those activities from achieving their potential as effective vehicles for common learning. Outside funding is usually tied to contact hours in credit courses; campus administration of extracurricular activities is often segregated from the "academic" areas; faculty members properly devote the bulk of their time to students enrolled in their courses; commuter students, who generally demonstrate less personal and intellectual development than resident students, are pulled in many directions by the demands of

families, jobs, and, of course, studies; two years--let alone the one-year tenure characteristic of a majority of DCCCD students--is hardly enough time to develop leadership among students who might aid in establishing an effective and continuing program of extracurricular activities.

Despite the obstacles, the fact remains that extracurricular activities do have--or can have--a meaningful effect on the total education of our students. Thus any comprehensive plan to promote common learning must attempt to integrate the curriculum with those elements beyond the curriculum.

THE FUTURE AND THE GENERAL EDUCATION CURRICULUM

The Need

As we work to design a relevant general education curriculum for the DCCCD, we must consider "ingredients" that will be useful to our students as they strive to lead productive lives in the years ahead. In past years, having a college degree in any discipline would virtually insure employment. At that time, the goal of institutions of higher education was to "educate," not to "train," and the task of designing a curriculum to define the "educated person" was an easier one. Today, one's employability is usually dependent upon having earned a degree in a specific field, having taken specific courses, and having developed specific skills. Obviously, designing a curriculum that is relevant to our student's needs yet still distinguishable as "general education" is more difficult today. Just as the world continues to change rapidly and grow increasingly more complex, so does the task of the educator in attempting to prepare the student for the future.

The Student of the Future

A look at socioeconomic trends today can help us define, with a fair degree of accuracy, a picture of the student of the future. Today's college student has a higher standard of living, more years of formal education, and can expect to live longer, thus enjoying more leisure time than ever before. College graduates also expect to obtain a higher degree of job satisfaction. Two out of three college students

today are working toward professional careers; two out of five for careers in law or medicine. "More money" is given as a reason by six out of ten students today for being in college and earning a degree. When students are asked what they value, "nice houses," "nice clothes," and "nice cars" are most often given as responses.

The world's population is expected to double within the next thirty-five years, while at the same time the world's natural resources are shrinking. Perhaps in response to a feeling of helplessness in solving world problems, today's college students feel optimistic about their own personal futures but pessimistic about the future of the country. According to Arthur Levine, the student of today is like a luxury passenger on a sinking ship. . . like one who is taking a first-class voyage on the Titanic. Yet the very survival of the human species may depend upon the ability of individuals of the future to solve the problems of world food and water shortages, the threat of nuclear war and the drying up of natural energy sources. Balancing the need for increased specialization of knowledge and skills with the need for a holistic perspective of global issues and concerns is the greatest challenge for the college student of the future.

Education in the Future

To make a significant impact on the student of the future, education will need to remain up-to-date in dealing with a changing society. Advancements in communication, computers, science, and technology must be incorporated into the educational process. Utilizing cable TV, video discs, personal computers, and electronic communication, while at the same time not dehumanizing education, will be a necessary step for institutions of higher learning.

Dealing with the information explosion is another important challenge for the educator of the future. For many, particularly those in technical fields, a great deal of the information they have at graduation will be obsolete within a few years. The average college graduate will change jobs seven times and make three major career changes in a lifetime. "Lifelong learning," to update information and acquire new skills, will become the norm.

Today (and probably in the future) employability is largely dependent upon the possession of technical skills. Promotability, on the other hand, is more dependent upon the kind of cognitive skills likely to be acquired through general education courses. "The ultimate purpose of futurism in education," states Alvin Toffler, "is . . . to help learners cope with real-life crises, opportunities, and perils." With content often becoming quickly outdated, we need to pay more attention to the process of education, to teaching students how to learn, how to be flexible, how to be creative. A computer language may become obsolete, but the student who can think logically will be able to continue interacting with computers.

Marilyn Ferguson, in her book The Aquarian Conspiracy, offers the following distinction between the old education and the new learning:

Assumptions of the Old Paradigm of Education	Assumptions of the New Paradigm of Learning
Emphasis on content, acquiring a body of "right" information, once and for all.	Emphasis on learning how to learn, how to ask good questions, pay attention to the right things, be open to and evaluate new concepts, have access to information. What is now "known" may change. Importance of context.

Assumptions of the Old Paradigm of Education	Assumptions of the New Paradigm of Learning
Learning as a product, a destination.	Learning as a process, a journey.
Hierarchical and authoritarial structure. Rewards conformity, discourages dissent.	Egalitarian. Candor and dissent permitted. Students and teachers see each other as poeple, not roles. Encourages autonomy.
Relatively rigid structure, prescribed curriculum.	Relatively flexible structure. Belief that there are many ways to teach a given subject.
Lockstep progress, emphasis on the "appropriate" ages for certain activities, age segregation. Compartmentalized.	Flexibility and integration of age groupings. Individual not automatically limited to certain subject matter by age
Priority on performance.	Priority on self-image as the generator of performance.
Emphasis on external world. Inner experience often considered inappropriate in school setting.	Inner experience seen as context for learning. Use of imagery, storytelling, dream journals. "Centering" exercises, and exploration of feelings encouraged.
Guessing and divergent thinking discouraged.	Guessing and divergent thinking encouraged as part of the creative process.
Emphasis on analytical, linear, left-brain thinking.	Strives for whole-brain education. Augments left-brain rationality with holistic, non-linear, and intuitive strategies. Confluence and fusion of the two processes emphasized.
Labeling (remedial, gifted, minimally brain dysfunctional, etc.) contributes to self-fulfilling prophecy.	Labeling used only in minor prescriptive role and not as fixed evaluation that dogs the individual's educational career.
Concern with norms.	Concern with the individual's performance in terms of potential. Interest in testing outer limits, transcending perceived limitations.

Assumptions of the Old Paradigm of Education	Assumptions of the New Paradigm of Learning
Primary reliance on theoretical abstract "book knowledge."	Theoretical and abstract knowledge heavily complemented by experiment and experience, both in and out of classroom. Field trips, apprenticeships, demonstrations, visiting experts.
Classroom designed for efficiency, convenience.	Concern for the environment of learning: lighting, colors, air, physical comfort, needs for privacy and interaction, quiet and exuberant activities.
Bureaucratically determined, resistant to community imput.	Encourages community imput, even community control.
Education seen as a social necessity for a certain period of time, to inculcate minimum skills and train for a specific role.	Education seen as lifelong process, one only tangentially related to schools.
Increasing reliance on technology (audiovisual equipment, computers, tapes, texts), dehumanization.	Appropriate technology, human relationships between teachers and learners of primary importance.
Teacher imparts knowledge; one-way street.	Teacher is learner, too, learning from students.

The prescription for a relevant general education curriculum for the future implied by the new learning paradigm includes three components: the opportunity to acquire information, the opportunity to develop learning skills, and the opportunity to obtain useful daily living skills. A government student may be assigned to visit and learn about a local branch of the government. Successful use of the bus schedule and the assertiveness to get past the secretary are daily living skills that may be used. Determining the right questions to ask in order to obtain the information sought will make use of cognitive skills. The student will learn information in a more direct and personal way, as contrasted with reading it in a textbook and, as the information changes, the student will have

the skills to maintain up-to-date knowledge of the subject. A curriculum which provides the opportunities to both acquire information and develop skills will better prepare students to face the challenges of the future.

THINKING ABOUT CHANGE

We have the opportunity in this project to think not only about what we will do (what changes, what innovations, what new processes or structures) but about how we will do it.

A Definition and A Model

A good place to begin thinking about change is with a definition and a model to map out the concept. Daniel E. Griffith offers this definition:

> "The word change is used to mean an alteration in the structure of the organization, in any of its processes, or in its goals or purposes. The revision of a rule, the introduction of a new procedure, or the revision of the purposes or directions of the organization are all subsumed under the concept of change."[1]

There are any number of good definitions of change, but this one has the virtue of concentrating on change as it is felt by the organization.

There are also many models of change. What the models look like depends on the kind of change, the setting, the author's view of change. Some writers described planned change models which are based on the assumption that change is a rational, logical, controllable process. Others see a more complex political model for change, with political infighting as the key element. It is interesting to note that Warren Bennis, whose Planning of Change (1962) is a landmark in the literature on planned change, wrote an article in 1972 based on his disastrous efforts to redesign the academic structure at SUNY-Buffalo in which his advice included, "Guard against the crazies," and other practical political advice.[2] Clearly, both careful planning and political sensitivity are necessary where a real change is contemplated.

Following is a simplified version of the Clark and Guba model[3] which is general enough to allow for both planning and political strategies:

1. Research	2. Development	3. Diffusion	4. Adoption
	A. Invention	A. Dissemination	A. Trial
	B. Design	B. Demonstration	B. Installation
			C. Institutionalization

We can see that this model (they call it a "schema") divides the process of change into 4 major stages. Working through the model:

1. The first stage is research. The objective here is to learn enough to be able to understand the situation and propose a change. The first part of this project, both for the district committee and for each campus committee, involves getting background on the issues concerning common learning, general education, and the district--in effect, research.

2. Development is divided into invention and design. Invention involves formulating the changes; design is putting the changes into a form that will work in this setting.

3. Diffusion consists of dissemination and demonstration. Dissemination is the creation of awareness of the change. Demonstration involves giving the people affected by the change the chance to examine and assess it in order to convince them it will be useful.

4. Adoption, the final stage, has three parts: trial, installation, and institutionalization. Trial is a testing out of a change on a small scale. Installation is actually putting the change into full operation, and institutionalization means establishing the change as a permanent part of the organization (another pair of authors call this stage "routinization"[4]).

The value of this model is that is points out all the steps that might be taken in the whole change process. These steps are not necessarily sequential; that is, development and diffusion might go on at the same time. The model reminds us that they are different activities which require different kinds of planning and strategy.

Resistance to Change

However neat and useful our model for change is, there will be some resistance to most changes we might propose. The first point to make is that change, including any changes we would like to see made, is not necessarily good for everyone--so resistance to change is not always irrational. Donald Klein writes of the "Defender Role" in organizations: he says that "defenders" are senstitive to unanticipated consequences of proposed changes, are especially likely to react to change which threatens the integrity of the system, and thus are keepers of the "core values" of the system that change agents may be ignoring. We must admit we are change agents in this process, but we mustn't think that "defenders" are our enemies. They are the people we must listen to AND influence--we must convince them and be influenced by them.[5]

What are the forces working against change--any change? Goodwin Watson lists five: the tendency to resist changes in known expectations of behavior, the way changes in one part of an organization affect other parts, vested interests (including the freedom to operate as we please), "sacred" values (like academic freedom), and rejection of the "outsider".

To overcome resistance, Watson offers the following principles: resistance will be less if--

1. Administrators, teachers, board members, and community leaders feel the project is their own, not one devised and operated by outsiders.

2. The project clearly has wholehearted support from top officials of the system.

3. Participants see the change as reducing rather than increasing their present burdens.

4. The project accords with values and ideals which have long been acknowledged by participants.

5. The program offers the kind of new experience which interests participants.

6. Participants feel that their autonomy and security are not threatened.

7. Participants have joined in diagnostic efforts leading them to agree on the basic problem and to feel its importance.

8. The project is adopted by consensual group decision.

9. Proponents are able to empathize with opponents, to recognize valid objections, and to take steps to relieve unnecessary fears.

10. It is recognized that innovations are likely to be misunderstood and misinterpreted, and if provision is made for feedback of perceptions of the project and for further clarification as needed.

11. Participants experience acceptance, support, trust, and confidence in their relations with one another.

12. The project is kept open to revision and reconsideration if experience indicates that adjustments would be desirable.[6]

By careful attention to Watson's principles we can think better about how we invent and design changes as well as how we diffuse information about them and set about to effect their adoption.

Two other sources of practical advice on bringing about change, specifically change related to general education, are Jerry Gaff's article "Avoiding the Potholes" which is part of committee members' packets of materials and Conrad's article on change in General Education: Issues and Resources, distributed to all committee members.

Application

When we get to the point in this project that we are thinking specifically about a particular change and how it will fare in the organization, it may be useful to look at the following questions with reference to the specific change and setting:

1. Describe the change you intend to make.

2. What specifically might be involved in making the change? Who would do what? How would individuals be practically affected?

3. How will you "create the need" for it?

4. How will you publicize the proposal?

5. What benefits to the faculty will you point to?

6. Can you show the compatibility of the change with present practice?

7. How will you build coalitions among the faculty (specific to this change)?

8. How will you use administrative leadership in your plan?

9. What rewards can you offer faculty?

10. Who will supervise the installation of the change?

11. What kind of training could you plan for faculty to facilitate this change?

12. Would you expect resistance to the change? Where do you think it would come from?

13. What form would you expect resistance to the change to take? (protests, sabotage, power politics, etc.)

14. What individuals or specific sectors of the campus (divisions, offices, subgroups, etc.) do you think will be likely to resist the change? What strategies (arguments, rewards, punishments, etc.) would you use to overcome resistance in these people or groups. Be as specific as possible.

15. What individuals or specific sectors of the campus do you think are likely to support the change? What strategies could you use to strengthen and use their potential support?

These questions might be expanded into a "Change Analysis Form" which would be useful for generating and gathering concrete thinking about the adoption process.

Conclusions

Change will come about as a result of this project. How useful and longlasting that change is and how constructive or destructive the process is will depend on how well we keep in mind the need to plan change in consultation with those affected by it and the need to see what we do as belonging to the community of students, faculty, and administration on each campus in the district.

Notes

1. Daniel E. Griffiths, "Administrative Theory and Change in Organizations," in Innovation in Education, ed. Matthew B. Miles (New York: Bureau of Publications, Teachers College, Columbia University, 1964) p. 428.
2. Warren Bennis, "The Sociology of Institutions or Who Sank the Yellow Submarine." Psychology Today, Nov. 1972, 112-120.
3. David Clark and Egon Guba, "An Examination of Potential Change Roles in Education." A paper presented at the Seminar on Innovation in Planning School Curricula, Columbus, Ohio, October, 1965.
4. Jerald Hage and Michael Aiken, Social Change in Organizations (New York: Random House, 1970) p. 93.
5. Donald Klein, "Some Notes on the Dynamics of Resistance to Change: The Defender Role," in Concepts for Social Change, ed. Goodwin Watson (Washington, D.C.: Cooperative Project for Educational Development, 1967) pp. 26-36.
6. Goodwin Watson, "Resistance to Change," in Concepts for Social Change, ed. Goodwin Watson (Washington, D.C.: Cooperative Project for Educational Development, 1967) pp. 18-23.

PARAMETERS FOR CHANGE

The DCCCD exists within the context of other local, state and national educational organizations and institutions. Because of this, there are several constraints which have an influence on the committees' eventual recommendations. These are, however, considerably less restrictive than one might expect. The primary parameters to curricular change are set by the Coordinating Board, the Texas Education Agency, and regulations for transfer to four-year colleges and universities.

Parameters of the Coordinating Board

Until recently the core curriculum was generally considered to be the following, even though there were specific exemptions:

6 hrs. English Grammar & Composition

6 hrs. Literature

6 hrs. Government (statute requirements)

6 hrs. History (statute requirements)

6-8 hrs. Laboratory Science

3 hrs. Humanities (appreciation courses)

This core has begun to break down, particularly in the seventies. During and since that time, specific core curricula were developed in the following majors:

Art (currently being revised)

Speech Communications

Math and Natural Sciences

Engineering

Business Administration

Theatre Arts

Social Work

Health Education (currently being revised)

Agriculture

The method used to develop such curricula is for the Coordinating Board to appoint a state-wide committee composed of community college faculty and administrators and a like group from four-year colleges and universities. The process of adopting or revising a curriculum takes anywhere from 2-4 eyars.

There are many commonalities among the core curricula, as outlined below:

Hours Required for Specific Majors

Course	Art	Speech	Math Nat. Sci.	Engin.	Bus. Ad.	The.	Soc.Wk.
Grammar/Comp.	12	6	6	9	6	6	6
Literature		3-6	6		3	3-6	3
History	6	6	6	6	6	6	6
Government	6	6	6	6	6	6	6
Science	6-8	6-8	6-8 (Bio.Sc) 6-8 (Psy.Sc)	8 (Chem) 8 (Phy.)	6-8		8 (Bio.Sc.)
Humanities	6 (or S.S)	3	6	3	6 (or Beh.Sc)		

A Very Brief Explanation of How Coordinating Board Approves Courses

The Coordinating Board publishes a manual known as the Course Guide Manual, more commonly referred to as "The Red Book." Basically, if a

course is listed in "The Red Book," a college simply requests approval to offer the course. If the course is not in "The Red Book," the community college must first verify that it is offered and funded by the State at the freshman/sophomore level in at least two public senior institutions. Approval is generally given and the course is added to "The Red Book" (Note: "The Red Book" was revised in 1975, and since that time at least 53 courses have been added. Of these additions, only one, Introduction to the Humanities, is openly an "interdisciplinary" course). A third method of approval is known as "unique need." If approval for a course cannot be gained under the first two methods, approval may be justified because the course is needed to serve the community. Courses approved in this method must be resubmitted for approval each year.

Texas Education Agency

All technical/vocational programs funded by TEA must have prior approval by the Agency. All programs must have an occupational objective and must meet the requirements of the Texas State Plan for Vocational Education. All courses funded by TEA must be a part of approved programs. In addition, programs having a licensure agency must meet the requirements of that agency and prepare students for the licensing or certification procedure associated with that vocation.

Preparatory instruction in TEA approved courses (if not organized on a block time basis) consists of three types of courses:

> Core instruction: courses directly related to the particular occupation.
>
> Related instruction: courses not a part of the specialty but closely related and necessary for the student to function competently in the particular occupation.

General instruction: courses not relating directly or indirectly to a specialty but providing general education or personal development.

Generally speaking, approximately 20% to 25% of a program is devoted to general instruction and is approved within the context of the total program. Curriculum changes must be approved by the Agency.

Transfer Considerations

In addition to the above, concern must be given to the transferability of general education courses to individual institutions. While a state-wide committee is addressing transfer of credit issues, it is not anticipated that a clear statement governing transferability statewide will be forthcoming in the foreseeable future. It would appear from an historical perspective that a core curriculum made up of existing (or familiar) course titles would be least troublesome in this regard, while interdisciplinary courses may present some difficulties.

POTENTIAL OBSTACLES TO GENERAL EDUCATION

Certainly the very act of re-examining a college curriculum and its outcomes is an ambitious enterprise. Indeed, Clark Kerr once remarked that changing a college curriculum was something akin to moving a cemetery. Because general education has been variously defined, its implementation has not been an easy task and, in many cases, has met with some opposition. Many of these potential obstacles to general education were suggested earlier by the questions following each individual charge to the committees, but they are mentioned again here so that committee members may consider them individually in light of the value of a general education core curriculum.

The Idea of the Comprehensive Community College

The thrust of the comprehensive community college over the past two decades has been to tailor services to the individual's unique needs. The idea has been to be something different to everyone. The attempt to identify general education goals and processes common to all of an extremely heterogeneous student body and to require all students to take a core curriculum will modify this perception of mission.

Common Outcomes Equal Intellectual Stagnation

The assertion that a common core curriculum emphasizing common values, common knowledge, etc. leads to intellectual uniformity and possibly a loss of creativity and individual insight is, perhaps, a valid danger and should be given careful concern in the design of the curriculum.

Student, Faculty, Institutional, and Public Demand for Vocational Education

Undoubtedly, the desire for specific vocational education and training is viewed as a most powerful opposition to general education. This perception emanates from students who do not enroll for courses outside their career area, from community advisory boards who specify more and more vocational skills courses in programs, from technical/occupational faculty who feel accountable for producing workers skilled enough to meet the demands of business and industry, and a pragmatic public which often equates education with getting a job and increasing income.

The Strength of the Disciplines and the Divisional Structure

Faculty, in general, may not be familiar with general education. Having received highly specialized education in their disciplines, they may be inclined to devalue general education as being without sufficient content and therefore not as worthy of academic respect. Also, if degree requirements are not extended and new degree requirements are set, this change may appear threatening to some present courses and programs. Indeed, many faculty may not be comfortable teaching in a general education program and might require considerable staff development. And finally, the present division structure may not provide the climate, leadership and supervision that a cross-disciplinary approach to general education might require.

Insufficient Student Skills and Development

It might be argued that large numbers of students lack the academic skills and level of intellectual development to cope with an integrating general education upon entrance to college. Students often

hold pragmatic, authoritarian values, seek immediate gratification, and are not yet prepared to cope with relativity and ambiguity.

BROOKHAVEN COLLEGE

MEMBER	AREA	PHONE
Sharon Burton, Chair	Office Occupations	5189
Gene Hilton	Mid-Management	5178
Mary Brumbach	Humanities	5132
Bob Stock	Physical Education	5153
Marion Mills	Communications	5251
Stephanie Venza	English	5168
Larry Darlage	Organic Chemistry	5151
Marcia Benner	Mathematics	5159
Diane Bagot	LRC/Resource Development	5129
Dianne Horton	Counseling/ Human Development	5236
Joan Weston	Sociology	5143

CEDAR VALLEY COLLEGE

MEMBER	AREA	PHONE
Ed Garcia, Chair	English/Journalism	4724
Bettie Meachum	Psychology	4774
Clarice McCoy	Business	4712
Joe Cortina	Reading	4722
Ron Beecham	Biology	4765
Brucie Cavett	Physical Education	4750
Cecil Brewer	Industrial Technology	4790
David Eishem	Air Conditioning and Major Appliance Repair	4792
Ines Gehrmann	Learning Resource Center	4887

EASTFIELD COLLEGE

MEMBER	AREA	PHONE
Robert Shofner, Chair	English	3131
Kenneth Bailey	Graphic Arts	3131
Chris Boldt	Mathematics	3153
James Bowers	Developmental Studies	3300
Curtis Clarke	Business/Economics	3118
Alyene Hegar	Psychology	3161
Mike Henry	Physical Education	3142
Furman Milton	Financial Aids/ Placement	3188
Michael Pitt	Physics	3153
John Stewart	Humanities	3132

EL CENTRO COLLEGE

MEMBER	AREA	PHONE
Sue Cross, Chair	Communications/ English	2282
Bill Barnhart	Accounting	2414
Doris Wilson	Office Careers	2242
Paxton Moore	Journalism/English	2282
Bill Fowler	Counseling/Human Development	2258
Pam Rouze	Developmental Reading	2270
Joy Davidson	Nursing	2393
Kathy Pritchett	Nursing	2378
Dee Swope	Interior Design	2429
Frank Koepnick	Biology	2386
Bob Mims	Geology/Physics/ Physical Science	2386
Bob Trotter	Government	2345
Rosa Babcock	LRC Consultant	2297
Bob Bennett	Registrar	2466
Marty Harman	Mathematics	2180

MOUNTAIN VIEW COLLEGE

MEMBER	AREA	PHONE
Kenneth Alfers, Chair	History	4161
Jim Kavalier	Director of Co-op and Placement	4273
Frank Korman	Accounting	4122
Curt Lovelace	Avionics	4153
Geoff Grimes	English	4126
Ann Faulkner	Learning Skills	4236
Anne Grissom	Communications	4130
Elaine Lockley	Mathematics	4233
Mark Hettle	Music	4246
Larry Pool	History/Government	4162
Ron Hert	Chairman, Communications	4124
Tom Goza	Associate Dean, Tech/Occ	4255

NORTH LAKE COLLEGE

MEMBER	AREA	PHONE
Sue Jones, Chair	Psychology	659-5355
Ida Baty	Counseling	659-5212
Lee Crowley	LRC	659-5343
Marilyn Gilchrist	Mathematics	659-5328
Nancy Jones	English	659-5273
Floyd King	Chemistry	659-5258
Nancy Kinsey	Asst. Director-Community Services	659-5203
Ed Kirchhoff	Economics	659-5380
Lona Parr	Physical Education	659-5357
Marty Ray	Art	659-5283
Charlotte Rike	History	659-5353
Gary Swaim	Chair, Communications/Humanities	659-5270
Clif Weaver	Associate Dean-Tech/Occ	659-5233
Roger Wilson	Carpentry	659-5322

RICHLAND COLLEGE

MEMBER	AREA	PHONE
Gary Verett, Chair	Psychology	4598
Michael Bell	Biology	4586
Helen Bourgeois	Mathematics	4576
Mary Cimarolli	English	4523
Sid Chapman	Philosophy	4567
Jackie Claunch	Chair, Tech/Occ	4491
Bob Hughes	Business	4629
Jerry Matlock	Developmental Math	4542
Conde Morris	Horticulture	4583
Parker Nunley	Anthropology	4594
Elaine Sullivan	Counseling	4409
Steffani Teagardin	Physical Education	4563

SKILLS FOR LIVING
DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

RATIONALE

The basic purpose of the Dallas County Community College District is "to help students equip themselves for effective living and for responsible citizenship in a rapidly changing local, state, national and world community." Much of what is required for effective living and responsible citizenship is seen as intangible, subjective, value-laden, and thus difficult to measure. Even so, the Dallas County Community College District recognizes its responsibility for addressing these issues. "Skills for Living" are designed to give concrete form to the "equipment" required for effective living.

Such "life skills" are not new to the realm of higher education; in fact, they have been fundamental to the general education of our youth for centuries. But in a time of increasing specialization and fragmentation, the fundamental principles that integrate the educational program must be emphasized. The Dallas County Community College District seeks not only to provide occupational and academic transfer programs, but also to develop in all of its graduates those knowledges, skills, and attitudes that will prepare them for "effective living and responsible citizenship." These life skills are not taught in a single course, but are reinforced throughout the curriculum and reflected in college degree requirements.

In earlier times, the "basics" of reading, writing, and arithmetic were not considered a part of general education. Rather, they were fundamental to it. Today, one cannot assume that all students are competent in these areas. The Dallas County Community College District adheres to the belief

that these skills are basic to effective living, and is committed to producing graduates who are competent in reading, writing, and computation. The development of these skills is a priority throughout the District and is fundamental to the general education provided by "Skills for Living."

ORGANIZATION

The eight competency areas identified in this report are divided into three broad and somewhat indistinct categories. The first category, which is termed "Relationships," includes the following competency areas: LIVING WITH YOURSELF; LIVING WITH OTHERS; and LIVING WITH ENVIRONMENTS. Individual fulfillment and social responsibility are achieved, in part, through the realization of one's unique sense of self, and through the responsible acceptance of the interdependency of that self with others and with one's environment. Upon this assumption the "Relationships" category is based.

Individuals play three important economic and socio-political roles in their lifetimes.

1. As workers, they contribute to the production of goods and services;
2. As consumers, they use the results of that production; and
3. As citizens and community members, they influence economic and socio-political decisions.

Thus the second competency category, "Roles and Functions" includes the following areas: LIVING AS A PRODUCER; LIVING AS A CONSUMER; and LIVING IN THE COMMUNITY.

The third category, "Orientations," is based upon the premise that an individual's approach to life situations is fundamental in whatever roles or relationships one is involved. A creative and futuristic approach to life

provides for individual growth and a greater readiness to accommodate change, and it can contribute to the development of a more dynamic and positive society. Thus LIVING CREATIVELY and LIVING IN THE FUTURE are competency areas included in this category.

Each competency area includes the assumptions upon which it is based, the goal to which it is directed, and a set of competency statements. The goal statements are, purposely, somewhat general in order to allow for change and for some latitude in interpretation. For example, LIVING IN THE COMMUNITY never specifies whether that community is local, state, national or international, thus allowing the competencies to be applied in an array of situations.

SUMMARY

The "Skills for Living" document establishes directions for the general education of DCCCD students. Many of the statements reflect outcomes that cannot be measured. Like the mission of our district, these statements are not objectives that are accomplished and replaced. Rather, they provide a map, a guide that is part of a continuing cycle which provides the basis for setting educational goals and developing instructional programs.

RELATIONSHIPS: LIVING WITH YOURSELF

ASSUMPTION: Individual growth can be achieved, in part, through the realization and expression of one's unique sense of self.

GOAL: Each DCCCD college will provide direction and opportunities for students to become more competent in developing themselves as individuals.

STUDENTS CAN:

1. Assess themselves objectively in order to achieve an awareness and acceptance of their capabilities and limitations.

2. Make appropriate decisions and cope successfully with adversities and setbacks, using them as opportunities for development.

3. Develop the self-direction, self-discipline, and sense of responsibility necessary to identify and pursue life goals.

4. Apply various methods to examine and assess their attitudes and values, understanding how these attitudes and values will influence all dimensions of their lives.

5. Employ various approaches for creatively assessing and solving problems and setting and achieving goals.

6. Develop realistic attitudes, plans and provisions for changing life situations and their own life cycles.

7. Learn, understand and employ methods for successfully dealing with change and mental and physical stress.

8. Examine and implement the principles of nutrition, exercise, safety and disease prevention that will contribute to their lifelong health.

9. Develop skills necessary for self-expression and for competent communications with others.

10. Develop and employ skills for learning and processing information that are necessary for existence in a technologically advanced environment.

11. Develop the understanding and skills that will allow for satisfying use of leisure time.

12. Develop the knowledge that can enable them to face their own deaths with honesty, dignity, and foresight.

13. Understand themselves as individuals in the total historical and cultural context, avoiding a narrow view of the world and their place in it.

RELATIONSHIPS: LIVING WITH OTHERS

ASSUMPTION: Individual fulfillment can be achieved, in part, by successful interaction with others.

GOAL: Each DCCCD college will provide opportunities for students to become more proficient in establishing and maintaining satisfying relationships with others.

STUDENTS CAN:

1. Communicate well with others using verbal and non-verbal skills.
2. Develop listening skills that are necessary for meaningful communications and interaction with others.
3. Understand the relationship among values, goals and behavior, and how this complex relationship affects interaction with others.
4. Accept individual responsibility for their behavior in building and maintaining relationships.
5. Use their knowledge of personal values and attitudes in understanding their interactions with other individuals, with members of a group, with handicapped individuals, and with differing elements of a heterogeneous society.
6. Participate in conflict resolution and work toward common goals by systematically solving problems when cooperating or collaborating in mutual endeavors.
7. Establish and maintain relationships at different levels of intensity.
8. Identify unsatisfactory personal relationships and make constructive decisions regarding those relationships.
9. Understand and apply parenting skills.
10. Accept, tolerate, and cope with frustration and delayed gratification from the efforts of living with others.
11. Develop the coping skills necessary to adjust to the loss or termination of a relationship, including the death of a loved one.

RELATIONSHIPS: LIVING WITH ENVIRONMENTS

ASSUMPTION: The quality of one's life depends, in part, upon an understanding of and responsible relationship with one's environment.

GOAL: Each DCCCD college will provide opportunities for students to understand the relationship between individuals and their environment and make responsible decisions about the use of natural, human, technological, and spatial resources.

STUDENTS CAN:

1. Demonstrate awareness of the need to balance long-term environmental objectives against economic and social needs.

2. Demonstrate awareness of the need to make wise, efficient use of all natural resources, including food, land, energy, wood, soil, and minerals.

3. Demonstrate an awareness and understanding of the social and political systems which influence environmental policy and the way individuals may participate in these systems.

4. Demonstrate awareness of the need for applying sound ecological principles in urban, regional and national planning which affects transportation systems, availability of energy, social behavior, health, education, housing, pollution, and diversity and stability in cities.

5. Demonstrate awareness of the ecological interactions and interdependency between man, other living beings, and the environment.

6. Demonstrate awareness of the effects of the environment on human behavior and health.

7. Demonstrate awareness of how human behavior and technology can enhance or detract from the environment.

8. Demonstrate an awareness of the environmental importance of historical, cultural and natural aspects of our heritage and the importance of diversity and variety of individual choice.

ROLES AND FUNCTIONS: LIVING AS A PRODUCER

ASSUMPTION: Individuals shape society and are shaped significantly by society through their experiences as workers both in the home and on the job.

GOAL: Each DCCCD college will provide opportunities for students to become more competent producers.

STUDENTS CAN:

1. Understand the factors that influence our attitudes and behavior concerning work and use this understanding to develop a successful and productive work attitude and ethic.

2. Appreciate the value of all types of work, from family room to board room, and of all workers that contribute to personal productivity and a productive society.

3. Communicate effectively in a variety of work situations to bring about constructive change and resolve conflict.

4. Understand the nature and role of self-motivation as it relates to successful and productive work experiences and develop the ability to motivate others.

5. Identify the steps involved in career development in order to update career decisions throughout life.

6. Understand the concepts of personal and professional ethics, including their demands and rewards, as they function in a variety of work situations.

7. Identify, develop, and apply personal characteristics which would enhance leadership abilities.

8. Understand the relationship between expectations of consumers and the responsibilities of producers.

9. Identify and evaluate organizational structures and characteristics as they relate to work roles and personal goals and values.

ROLES AND FUNCTIONS: LIVING AS A CONSUMER

ASSUMPTION: Consumer skills are necessary to function effectively in our society.

GOAL: Each DCCCD college will provide opportunities for students to become more competent as consumers.

STUDENTS CAN:

1. Understand the American economic system and its impact upon the individual consumer.

2. Understand the unique nature and dynamics of the American free enterprise system.

3. Understand consumer responsibilities and impacts of consumer behavior, including the relationship between expectations of consumers and the responsibilities of producers.

4. Identify laws and agencies which control, protect, and serve consumers and use such laws and agencies to protect and enhance personal and community consumer rights.

5. Understand and manage personal finances in areas such as budgeting, banking, insurance, credit, investments, and taxes.

6. Understand bases for comparison shopping to obtain maximum satisfaction from goods and services.

7. Possess the basic computational and reading skills to enable them to function as effective consumers.

8. Understand the techniques of advertising and the effects of mass communications on expectations and actions.

ROLES AND FUNCTIONS: LIVING IN THE COMMUNITY

ASSUMTION: The quality of one's life depends, in part, upon successful relationship with one's community.

GOAL: Each DCCCD college will provide opportunities for students to become more competent in using their skills and initiative to serve their community and improve its quality of life.

STUDENTS CAN:

1. Understand the personal commitment necessary for responsible community involvement.

2. Contribute to the study and analysis of community problems and the implementation of practical solutions to these problems as an individual or as a member of a group.

3. Understand social and political processes and their structures in order to enhance their own well-being and that of the community.

4. Locate and employ appropriate public and/or private services for assistance in solving individual or community problems.

5. Understand and apply constructive strategies which take into account diverse interests in the resolution of community issues.

6. Evaluate and understand the relationship between community values and personal value commitments.

7. Demonstrate awareness of the impact of community decisions on individuals and groups.

ORIENTATIONS: LIVING CREATIVELY

ASSUMPTION: Individual creative abilities can be identified, developed, and utilized to benefit both the individual and society.

GOAL: Each DCCCD college will provide opportunities for students to become more proficient in the assessment, development, and application of their creative abilities.

STUDENTS CAN:

1. Develop critical reasoning abilities that demonstrate independence of thought.
2. Develop and maintain an attitude of curiosity.
3. Formulate a visionary and open attitude toward change which may require modification or rejection of previously accepted ideas.
4. Develop and use individual talents for creative expression.
5. Develop creative abilities as a person.
6. Identify quality in artistic expression and seek to include this quality in their lives.
7. Employ a courageous attitude in expressing their personal convictions.
8. Creatively explore concepts and bodies of knowledge and constructively question established ideas.
9. Appreciate work as a reflection of man's creative endeavors.
10. Develop an appreciation for spontaneity both in their own lives and the lives of others.

ORIENTATIONS: LIVING IN THE FUTURE

ASSUMPTION: Examination of possibilities for the future will enable individuals to adapt to change more readily.

GOAL: Each DCCCD college will provide opportunities for students to become more proficient in anticipating and accommodating change and to become more competent in examining possible alternatives for the future.

STUDENTS CAN:

1. Understand the inevitability of change.
2. Recognize the effects of change on individuals and society.
3. Consider possible changes in organizations of the future which could affect working environments.
4. Understand the changes created in and by a technological society and the possible impacts of these changes.
5. Examine and assess human values that may be required to survive in the possible societies of the future.
6. Consider possible changes to present governmental functions in societies of the future.
7. Examine and assess possible impacts of trends in science and medicine and the attendant ethical problems.
8. Examine and assess possible changes in lifestyles associated with natural resource depletion.
9. Recognize possibilities for transportation and communication in the future and the attendant impacts on society.
10. Analyze forms leisure might take in the future.

DEGREE REQUIREMENTS

The College confers the Associate in Arts and Sciences Degree upon students who have completed all general and special requirements for graduation. Each degree candidate must earn the last 15 hours as a resident student in the District colleges or accrue 45 hours in residence. The degree is granted by the District college at which the student took the last 15 hours or where the majority of hours were accrued. Correspondence work must be approved by the Registrar for graduation credit. No more than one-fourth of the work required for any degree or certificate may be taken by correspondence.

Associate in Arts and Sciences Degree

Students must have a minimum of sixty (60) hours and a grade point average of at least "C" (2.0) to receive the Associate in Arts and Sciences Degree. These sixty hours may be earned at any District college. They must include:

(1) English 101-102 plus an additional 6 hours of English for a total of 12 credit hours in English.

(2) Eight (8) credit hours in Laboratory Science (Music majors will substitute Music 101-102 for this requirement).

(3) Twelve (12) credit hours of History 101-102 and Government 301-202. No substitutions are allowed. Only 3 credit hours of history and 3 credit hours of government may be earned through credit by examination. CLEP credit may not be used to meet this requirement.

(4) Three (3) credit hours in Humanities, selected from Theater 101, Art 104, Music 104, Humanities 101 or Philosophy 102.

A maximum of 4 physical education activity hours may be counted as credit toward requirements for graduation. Courses numbered 99 and below

cannot be included to meet degree or certificate requirements. Music 199, Art 199, and Theater 199 may not be counted toward the 60 hour minimum. All students planning to transfer to a four-year institution may complete their four semester requirements in physical education during their freshman and sophomore years. Students are urged to consult the catalogs of the institutions to which they may transfer for their special requirements. These catalogs should be used by students and advisors in planning programs.

Associate in Applied Arts and Sciences Degree and Certificate Career Programs

Students must have a minimum of 60 credit hours and a grade point average of at least "C" (2.0) to receive the Associate in Applied Arts and Sciences Degree. For some programs, more than 60 credit hours are required. All prescribed requirements for the specific Technical/Occupational Program in which the student is enrolled must be completed. These programs may also have other criteria in addition to degree requirements. See the Technical/Occupational Programs section of the DCCCD catalog for a more detailed explanation. The requirements for certificates are detailed under specific programs listed in the Technical/Occupational Programs section of the DCCCD catalog. A "C" (2.0) grade point average is required. A maximum of 4 physical education activity hours may be counted as credit toward graduation. Courses numbered 99 and below may not be included to meet degree or certificate requirements. Music 199, Art 199, and Theater 199 may not be counted toward the 60-hour minimum.

Associate Programs

Program	English	Social Science	Science	Psychology	Math	Other	Total Req'd. Hours
Agriculture:							
Animal Medical Technology	COM 131			PSY 131	MTH 139		9
Horticulture	COM 131		BIO 115 or 110 CHM 115 or PSC 118		MTH 195 or MTH 130		15
Distribution & Mktg:							
Management Careers	COM 131 & 132 or ENG 101 & 102 plus SPE 105*				MTH 111 or 112 or 130	HUM 101	12/15*
Retail Distribution & Marketing	COM 131 & 132 or ENG 101 & 102 plus SPE 105*			PSY 131	MTH 130		15/18*
Distribution Technology	COM 131 & 132 or ENG 101 & 102				MTH 130 or MTH 111		12
Transportation Technology	COM 131 & 132 or ENG 101 & 102				MTH 130 or MTH 111		9
Hotel-Motel Operations *only 3 hrs. req'd. total	COM 131 & 132 or ENG 101 & 102	HST 101 & 102 or GVT 201 & 202 *SOC101 or*SOC 102		*HD105 or *PSY 105 or	MTH 130		21
Postal Service Administration	COM 131 & 132	GVT 201 SOC 101		PSY 131 PSY 105 PSY 202	MTH 130		27
Real Estate	COM 131 & 132 or ENG 101 & 102	GVT 201			MTH 130		12
Health:							
Social Work Assoc.	ENG 101 & 102	SOC 101 SOC 203 SOC 102 SOC 204 SOC 206		PSY 105 PSY 201 PSY 205			30
Associate Degree Nursing	ENG 101 & 102	SOC 101	PSC118 or elective BIO120 or BIO221 BIO121 or BIO222 BIO 216	PSY 105 PSY 201			24
Medical Assisting Technology	ENG 101 & 102 or COM 131 & 132		BIO 123	HD 105 or HD 107 PSY 105 or SOC 101			18

Program	English	Social Science	Science	Psychology	Math	Other	Total Req'd. Hours
Health contd:							
Medical Laboratory Technician	ENG 101 & 102		BIO 101 CHM 203 CHM 101 BIO 222 BIO 102 CHM 102 BIO 221	PSY 105 HD 105	MTH 101		36
Radiography Technology	COM 131 & 132 or ENG 101 & 102		BIO 120,121	PSY 207 PSY 105	MTH 139		22
Respiratory Therapy Technician	ENG 101 & 102		CHM 101 or 115 BIO 120 or 221 CHM 102 or 116 BIO 121 or 222 BIO 216				21
Optical Technology	ENG 101 or COM 131	GVT 201 or HST 101	PHY 131	PSY 131	MTH 195		15
Homemaking:							
Child Development Associate	COM 131 & 132 or ENG 101 & 102	SOC 203 SOC 101 SS131 or HST 101 SS132 or HST 102		HD 106 or PSY 105		HUM 101	24
Apparel Design	ENG 101 & 102			PSY 105 or HD 105		HUM 101	12
Food Service Dietetic Technician	COM 131 & 132 or ENG 101 & 102	HST 101 & 102 or GVT 201 & 202		HD 105 or HD 107 PSY 105 or SOC 101			18
Interior Design	COM 132	SOC 102		HD 105			9
Pattern Design	COM 131 & 132 or ENG 101 & 102	3 hrs. HST 3 hrs. GVT		PSY 105 HD 105		HUM 101	18
Office Occupations:							
Accounting Assoc.	COM 131 & 132 or ENG 101 & 102 & SPE 105*	GVT 201			MTH 111 MTH 130		15/18*
Office Career Associate	COM 131 & 132 or ENG 101 & 102 & SPE 105*			PSY 131 or PSY 105	MTH 130	HUM 101	18/21*

Program	English	Social Science	Science	Psychology	Math	Other	Total Req'd. Hours
Office Occupations contd:							
Data Processing Programmer	COM 131 & 132 or ENG 101 & 102				DP math or MTH 111 or 112 or 130 or equivalent		9
Related:							
Training Paraprofessionals for the Deaf	ENG 101 & 102						6
Educational Paraprofessional Education Associate	COM 131 & 132 or ENG 101 & 102 & 6 hrs at 200 level						12
Technical Education:							
Digital Electronics Technology	COM 131 & 132 or ENG 101 & 102				MTH 195 MTH 196		12
Drafting & Design Technology	COM 131 & 132 or ENG 101 & 102	GVT 201 & 202 or HST 101 & 102	PHY 131	HD 105 or PSY 131	MTH 196 or MTH 102 MTH 195 or MTH101		24
Architectural Technology	6 hours				3 hours		9
Aviation Maintenance Technology	COM 131 or ENG 101	SS 131 or HST 101		PSY 131			9
Aviation Technology	ENG 101 SPE 105			PSY 131 or PSY 105	MTH 101 or 130 or 195 or 111		12
Electronics Technology	6 hours	6 hours	4 hrs. Physics	3 hrs. HR or PSY or HD	6 hours		24
Solar Energy Technology	COM 131			*PSY 131 or approved elective	MTH 195 MTH 196 MTH 107		12/15*
Engineering Tech.	COM 131		PHY 131		MTH 195 MTH 196		12

Program	English	Social Science	Science	Psychology	Math	Other	Total Req'd Hours
Industrial:							
Auto body Technology	COM 131		PHY 131	PSY 131	MTH 130		12
Automotive Machinist Associate	COM 131	GVT 210		BUS 237 or PSY 131	MTH 195	HUM 101	18
Automotive Technician Associate	COM 131	GVT 201	PHY 131		MTH 195	HUM 101	15
Automotive Parts Sales and Service Associate	COM 131	GVT 201			MTH 130	HUM 101	12
Automotive Technology * 3 hrs. total req'd	COM 131	GVT 201*	PHY 131	HD 105* PSY 131*	MTH 195	HUM 101*	12
Automotive Technology Apprenticeship	COM 131	SS 131	PHY 131		MTH 195 or MTH 139		12
Graphic Communications	COM 131 or ENG 101 COM 132 or SPE 105 JN 101, 102, 103			PSY 131	MTH 130		21
Advertising Art Associate	COM 131 & 132			PSY 131	MTH 130	HUM 101	15
Commercial Residential & Industrial Air Conditioning & Refrigeration Tech.	COM 131	SS 131	PHY 131	PSY 131 or MAR 131	MTH 195		15
Welding Technology	COM 131		PHY 131	PSY 131	MTH 195		15
Food Service Operations	COM 131 & 132 or ENG 101 & 102	HST 101 & 102 or GVT 201 & 202 SOC 101*		HD 105 or HD 107 or PSY 105 or SOC 101*	MTH 130		18

Program	English	Social Science	Science	Psychology	Math	Other	Total Req'd. Hours
Industrial contd:							
Fire Protection Technology	6 hours	GVT - 3 hours	CHM 115 & 116 CHM 170		MTH 130		21
Police Science Technology	ENG 101 & 102 or COM 131 & 132	HST 101 & 102 SOC 101 or SOC 102		PSY 105			15
Machine Shop & Machine Parts Inspection	COM 131		PHY 131	PSY 131	MTH 195 & 196		15
Residential & Commercial Carpentry	COM 131 & 132	SS 131		PSY 131	MTH 195		15
Diesel Mechanics	COM 131	SS 131	PHY 131		MTH 195		12
Electrical	COM 131	SS 131			MTH 195		9
Construction Management & Technology	COM 131 or ENG 101			HD 107 or HD 105 or PSY 105			6

SUMMARY OF DCCCD CREDIT STUDENT STATISTICS
FALL 1980

Student Profile	Brookhaven	Cedar Valley	Eastfield	El Centro	Mountain View	North Lake	Richland	District
Headcount	5,326	1,874	8,094	6,143	5,477	4,115	11,363	42,392
Male	2,282	812	3,882	1,960	2,945	1,965	5,059	18,905
Female	3,003	1,062	4,210	4,182	2,520	2,147	6,291	23,415
Unknown	41	0	2	1	12	3	13	72
First Year	4,533	1,519	6,204	4,456	4,123	3,560	9,202	33,597
Second Year	618	272	1,370	1,204	959	426	1,707	6,556
Unclassified	175	83	520	483	395	129	454	2,239
Part Time	4,012	1,352	5,921	4,468	4,003	3,302	8,064	31,122
Full Time	1,314	522	2,173	1,675	1,474	813	3,299	11,270
In-District	4,693	1,758	7,728	5,706	5,161	3,806	9,882	38,734
Out-of-District	386	84	232	239	155	220	1,001	2,317
Out-of-State	206	24	115	138	146	72	369	1,070
Out-of-Country	41	8	19	60	15	17	110	270
Unknown	0	0	0	0	0	0	1	1
Day Students	2,437	797	3,777	3,023	2,267	1,579	5,768	19,648
Night Students	2,358	919	3,433	2,610	2,902	2,039	4,244	18,505
Day/Night Students	531	158	884	510	308	497	1,351	4,239
Total Credit Hours	40,098	14,740	64,091	50,729	44,354	29,218	91,380	334,610
FTE*	2,673	983	4,273	3,382	2,957	1,948	6,092	22,308
Technical/Occupational**	2,067	1,023	3,841	3,925	2,887	2,478	3,997	20,218
Transfer/Undecided	3,259	851	4,253	2,218	2,590	1,637	7,366	22,174
Age:								
16-20	1,794	684	2,660	1,453	1,686	1,095	3,970	13,342
21-25	1,527	368	1,[illegible]6	1,631	1,333	1,012	3,030	10,837
26-30	746	239	1,[illegible]7	1,250	935	690	1,592	6,869
31-35	469	247	893	786	644	447	1,039	4,525
36-40	297	115	510	433	366	334	747	2,802
41-45	204	77	308	256	217	214	452	1,728
46-50	117	41	213	176	148	154	249	1,098
51 or over	131	43	215	157	135	166	267	1,114
Unable to Calculate	41	0	2	1	13	3	17	77

Student Profile	Brookhaven	Cedar Valley	Eastfield	El Centro	Mountain View	North Lake	Richland	District
Average Student Age	26	27	27	28	27	28	26	27
Contact Hours (TEA)	229,832	154,538	509,080	677,666	427,346	366,859	393,520	2,758,841
Contact Hours (CB)	572,200	167,280	818,760	469,608	517,576	314,112	1,331,672	4,191,208
Total C. H.	802,032	321,818	1,327,840	1,147,274	944,922	680,971	1,725,192	6,950,049
Ethnicity:								
White not Hispanic	4,779	964	7,015	2,672	3,591	3,810	10,454	33,285
Black not Hispanic	162	827	504	2,823	1,299	93	418	6,126
Hispanic	211	62	403	502	440	137	241	1,996
Asian/Pacific Islander	106	12	121	107	81	51	202	680
American Native	23	7	49	38	42	21	30	210
Unknown	45	2	2	1	24	3	18	95

*FTEs calculated on the basis of 15 credit hours.
**Technical/Occupational is a headcount of students who are taking at least one Tech/Occ course.

Planning, Marketing, & Research
September 1981

SUMMARY OF DCCED CREDIT STUDENT STATISTICS
FALL 1981

Student Profile	Brookhaven	Cedar Valley	Eastfield	El Centro	Mountain View	North Lake	Richland	District
Headcount	6,010	2,210	8,254	6,470	5,899	4,526	12,240	45,609
Male	2,574	899	3,882	2,149	3,016	2,161	5,464	20,145
Female	3,417	1,311	4,372	4,321	2,879	2,365	6,776	25,441
Unknown	19	0	0	0	4	0	0	23
First Year	5,003	1,755	6,251	4,661	4,515	3,785	9,940	35,910
Second Year	790	338	1,428	1,288	873	547	1,829	7,193
Unclassified	217	117	575	521	406	194	471	2,501
Part Time	4,541	1,624	6,009	4,946	4,494	3,651	8,905	34,170
Full Time	1,469	586	2,245	1,524	1,405	875	3,335	11,439
In-District	5,201	2,027	7,792	6,006	5,550	4,128	10,529	41,233
Out-of-District	559	155	318	239	193	294	1,229	2,987
Out-of-State	210	22	106	163	138	86	376	1,101
Out-of-Country	40	6	38	62	18	18	106	288
Unknown	0	0	0	0	0	0	0	0
Day Students	2,631	1,074	3,851	3,153	2,448	1,674	5,909	20,740
Night Students	2,567	954	3,460	2,821	3,024	2,273	4,909	20,008
Day/Night Students	812	182	943	496	427	579	1,422	4,861
Total Credit Hours	45,183	16,956	65,626	50,811	45,601	31,843	95,766	351,786
FTE*	3,012	1,130	4,375	3,387	3,040	2,123	6,384	23,451
Technical/Occup.**	2,265	1,311	3,966	4,271	3,192	2,617	4,542	22,154
Transfer/Undecided	3,745	899	4,288	2,199	2,717	1,909	7,698	23,455
Age:								
16-20	1,941	770	2,667	1,609	1,786	1,123	4,111	14,007
21-25	1,690	466	1,908	1,741	1,455	1,181	3,379	11,820
26-30	966	326	1,424	1,305	1,043	806	1,836	7,706
31-35	548	265	933	769	706	484	1,180	4,885
36-40	324	153	545	450	377	346	771	2,966
41-45	233	116	355	256	243	260	434	1,897
46-50	149	56	215	147	138	124	293	1,172
51 or over	138	58	206	193	147	152	235	1,129
Unable to Calculate	21	0	1	0	4	0	1	27

Student Profile	Brookhaven	Cedar Valley	Eastfield	El Centro	Mountain View	North Lake	Richland	District
Average Student Age	26	27	27	27	27	28	26	27
Contact Hours (TEA)	270,626	172,478	546,102	696,806	427,434	359,934	406,448	2,879,828
Contact Hours (CB)	646,576	187,008	826,248	459,576	519,472	354,832	1,374,304	4,368,016
Total C. H.	917,202	359,486	1,372,350	1,156,382	946,906	714,766	1,780,752	7,247,844
Ethnicity:								
White	5,324	1,141	7,035	2,728	3,856	4,076	11,046	35,206
Black	218	987	518	3,067	1,382	142	524	6,838
Hispanic	264	68	444	511	503	181	329	2,300
Asian/Pacific Islander	141	7	187	99	108	68	256	866
American Native	20	4	48	29	35	25	41	202
Unknown	43	3	22	36	15	34	44	197
Enrollment History:								
New	1,956	740	2,484	1,672	1,869	1,815	3,927	14,463
Continuing	2,629	929	3,887	3,212	2,630	1,968	5,583	20,838
Stop-Outs Returning***	1,304	536	1,841	1,512	1,368	727	2,621	9,909

*FTEs calculated on the basis of 15 credit hours.
**Technical/Occupational is a headcount of students who are taking at least one Tech/Occ course.
***Stop-Outs Returning is a headcount of returning students who were not enrolled the previous long semester.

Planning, Marketing, & Research
September 1981

FACULTY CHARACTERISTICS

	BROOKHAVEN		CEDAR VALLEY		EASTFIELD		EL CENTRO		MOUNTAIN VIEW	
	FULL TIME	*PART TIME	FULL TIME	*PART TIME	FULL TIME	*PART TIME	FULL TIME	*PART TIME	FULL TIME	*PART TIME
Sex										
Male	29 (44.6%)	254 (44.6%)	34 (73.9%)	124 (50.0%)	85 (72.6%)	394 (57.9%)	68 (38.0%)	311 (55.2%)	60 (70.6%)	383 (63.6%)
Female	36 (55.4%)	316 (55.4%)	12 (26.1%)	124 (50.0%)	32 (27.4%)	286 (42.1%)	111 (62.0%)	252 (44.8%)	25 (29.4%)	219 (36.4%)
Total	65 (100.0%)	570 (100.0%)	46 (100.0%)	248 (100.0%)	117 (100.0%)	680 (100.0%)	179 (100.0%)	563 (100.0%)	85 (100.0%)	602 (100.0%)
Age										
30 & Under	9 (13.8%)	114 (20.0%)	4 (8.7%)	71 (28.6%)	0 (0.0%)	121 (17.8%)	14 (7.8%)	116 (20.6%)	5 (5.9%)	136 (22.6%)
31 - 40	33 (50.8%)	252 (44.2%)	34 (74.0%)	92 (37.1%)	50 (42.8%)	309 (45.4%)	65 (36.3%)	255 (45.2%)	36 (42.3%)	226 (37.5%)
41 - 50	17 (26.2%)	114 (20.0%)	6 (13.0%)	56 (22.6%)	52 (44.4%)	152 (22.3%)	66 (36.9%)	105 (18.7%)	31 (36.5%)	146 (24.3%)
51 & Over	6 (9.2%)	90 (15.8%)	2 (4.3%)	29 (11.7%)	15 (12.8%)	98 (14.4%)	34 (19.0%)	87 (15.5%)	13 (15.3%)	94 (15.6%)
Total	65 (100.0%)	570 (100.0%)	46 (100.0%)	248 (100.0%)	117 (100.0%)	680 (99.9%)	179 (100.0%)	563 (100.0%)	85 (100.0%)	602 (100.0%)
Ethnicity										
White	63 (97.0%)	533 (93.5%)	42 (91.3%)	228 (91.9%)	110 (94.0%)	649 (95.4%)	150 (83.8%)	490 (87.0%)	76 (89.4%)	528 (87.7%)
Black	0 (0.0%)	7 (1.2%)	3 (6.5%)	16 (6.5%)	4 (3.4%)	11 (1.6%)	18 (10.1%)	51 (9.1%)	7 (8.2%)	53 (8.8%)
Hispanic	1 (1.5%)	18 (3.1%)	1 (2.2%)	3 (1.2%)	2 (1.7%)	9 (1.3%)	7 (3.9%)	20 (3.6%)	2 (2.4%)	15 (2.5%)
Oriental	0 (0.0%)	2 (.4%)	0 (0.0%)	0 (0.0%)	1 (.9%)	4 (.6%)	2 (1.1%)	2 (.3%)	0 (0.0%)	3 (.5%)
American Indian	1 (1.5%)	8 (1.4%)	0 (0.0%)	1 (.4%)	0 (0.0%)	1 (.1%)	2 (1.1%)	0 (0.0%)	0 (0.0%)	2 (.3%)
Non Resident Alien	0 (0.0%)	1 (.2%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	5 (.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Unknown	0 (0.0%)	1 (.2%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (.2%)
Total	65 (100.0%)	570 (100.0%)	46 (100.0%)	248 (100.0%)	117 (100.0%)	(99.8%)	79 (100.0%)	563 (100.0%)	85 (100.0%)	602 (100.0%)
Years of Experience										
3 or Less	26 (40.0%)	505 (88.6%)	13 (28.3%)	217 (87.5%)	7 (6.0%)	(76.0%)	55 (30.7%)	421 (74.8%)	5 (5.9%)	467 (77.6%)
4 - 6	11 (16.9%)	39 (6.8%)	25 (54.3%)	22 (8.9%)	17 (14.5%)	91 (13.4%)	39 (21.8%)	85 (15.1%)	17 (20.0%)	83 (13.8%)
7 - 9	13 (20.0%)	18 (3.2%)	4 (8.7%)	5 (2.0%)	20 (17.1%)	52 (7.6%)	31 (17.3%)	40 (7.1%)	21 (24.7%)	36 (5.9%)
10 & Over	15 (23.1%)	8 (1.4%)	4 (8.7%)	4 (1.6%)	73 (62.4%)	20 (3.0%)	54 (30.2%)	17 (3.0%)	42 (49.4%)	16 (2.7%)
Total	65 (100.0%)	570 (100.0%)	46 (100.0%)	248 (100.0%)	117 (100.0%)	680 (100.0%)	179 (100.0%)	563 (100.0%)	85 (100.0%)	602 (100.0%)
Highest Degree Held										
Bachelor's	1		3		0		13		2	
Master's	52		36		94		145		55	
Doctorate	12		7		23		21		24	
Total	65		46		117		179		85	

* Includes both credit instructors and community service instructors.

	NORTH LAKE		RICHLAND		DISTRICT	
	FULL TIME	*PART TIME	FULL TIME	*PART TIME	FULL TIME	*PART TIME
Sex						
Male	35 (58.3%)	308 (62.0%)	100 (64.5%)	422 (49.4%)	411 (58.1%)	2,196 (54.7%)
Female	25 (41.7%)	189 (38.0%)	55 (35.5%)	432 (50.6%)	296 (41.9%)	1,818 (45.3%)
Total	60 (100.0%)	497 (100.0%)	155 (100.0%)	854 (100.0%)	707 (100.0%)	4,014 (100.0%)
Age						
30 & Under	2 (3.3%)	101 (20.3%)	5 (3.2%)	153 (17.9%)	39 (5.5%)	812 (20.2%)
31 - 40	32 (53.3%)	232 (46.7%)	66 (42.6%)	431 (50.5%)	316 (44.7%)	1,797 (44.8%)
41 - 50	17 (28.3%)	127 (25.6%)	64 (41.3%)	180 (21.1%)	253 (35.8%)	880 (21.9%)
51 & Over	9 (15.0%)	37 (7.4%)	20 (12.9%)	90 (10.5%)	99 (14.0%)	525 (13.1%)
Total	60 (99.9%)	497 (100.0%)	155 (100.0%)	854 (100.0%)	707 (100.0%)	4,014 (100.0%)
Ethnicity						
White	58 (96.6%)	473 (95.2%)	144 (92.9%)	817 (95.7%)	643 (91.0%)	3,718 (92.6%)
Black	1 (1.7%)	6 (1.2%)	6 (3.9%)	13 (1.5%)	39 (5.5%)	157 (3.9%)
Hispanic	1 (1.7%)	11 (2.2%)	5 (3.2%)	6 (.7%)	19 (2.7%)	92 (2.1%)
Oriental	0 (0.0%)	2 (.4%)	0 (0.0%)	6 (.7%)	3 (.4%)	19 (.5%)
American Indian	0 (0.0%)	3 (.6%)	0 (0.0%)	1 (.1%)	3 (.4%)	16 (.4%)
Non Resident Alien	0 (0.0%)	2 (.4%)	0 (0.0%)	8 (.9%)	0 (0.0%)	16 (.4%)
Unknown	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (.4%)	0 (0.0%)	6 (.1%)
Total	60 (100.0%)	497 (100.0%)	155 (100.0%)	854 (100.0%)	707 (100.0%)	4,014 (100.0%)
Years of Experience						
3 or Less	18 (30.0%)	431 (86.7%)	12 (7.7%)	614 (71.9%)	136 (19.3%)	3,172 (79.1%)
4 - 6	19 (31.7%)	56 (11.3%)	22 (14.2%)	154 (18.0%)	150 (21.2%)	530 (13.2%)
7 - 9	6 (10.0%)	8 (1.6%)	70 (45.2%)	67 (7.9%)	165 (23.3%)	226 (5.6%)
10 & Over	17 (28.3%)	2 (.4%)	51 (32.9%)	19 (2.2%)	256 (36.2%)	86 (2.1%)
Total	60 (100.0%)	497 (100.0%)	155 (100.0%)	854 (100.0%)	707 (100.0%)	4,014 (100.0%)
Highest Degree Held						
Bachelor's	1		5		25	
Master's	38		119		543	
Doctorate	21		31		139	
Total	60		155		707	

* Includes both credit instructors and community service instructors.

AVOIDING THE POTHOLES: 43 STRATEGIES FOR REFORMING GENERAL EDUCATION *

General education is enjoying a revival of interest today as hundreds of colleges and universities have assembled committees to conduct a review of their general education programs. Members of such groups usually bring a great deal of talent and enthusiasm to the task, but few have prior experience with providing leadership in institutional change. Faculty members tend to be attracted to the substantive issues at stake--the nature of general education, the qualities of an educated person, problems with the current program, aspects of an ideal general education. The strategic processes or procedures to be used by the group have much less interest to the average committee member.

Task forces in this situation tend to adopt rather common sense approaches to fashion a report. Unfortunately, some of these common sense approaches turn out to be naive, and proposals--even good ones--hit potholes along the way. Such potholes can slow down the progress of curriculum reform and, in some cases, lead to a breakdown altogether. They also are responsible for some bittersweet academic humor, such as the oft-cited aphorism that it is easier to move a cemetery than to change the curriculum.

This article will make explicit many of the common assumptions made by curricular reform committees and offer alternatives that may help such a group avoid the jarring effects of the ever-present potholes. Common sense approaches, to be sure, sometimes prove to be the best ones. But the thesis supported by this article is that they are more likely to work if they are consciously chosen in the light of alternatives rather than regarded simplistically as the only way to proceed.

The first pothole that should be avoided, then, is the notion that strategies are unimportant, that they are less important than the substantive issues, and that they enter the picture only after a proposed program is approved and one must mobilize for implementation. Rather, strategies are critical; they are as important as the

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substance; and they need to be considered from the outset.

There is a fairly extensive body of literature on planned change in higher education (Havelock, 1971; Sikes, Schlesinger, Seashore, 1974; Zaltman and Duncan, 1977; Lindquist, 1978, 1980). Although useful, little of that literature deals specifically with change in general education curricula. Below is a list of 43 common change strategies, potholes if you will, that have been culled from the work of actual general education committees. For each pothole an alternative strategy is suggested as a route that may avoid those unpleasant bumps in the road to curricular reform. The discussion will be grouped around several topics: the nature of the task, procedures of the task force, concepts of general education, program planning, securing approval of proposals, and implementing new programs.

The Task

1. Find a program to import. During the first workshop of the Project on General Education Models (GEM), task force members of the GEM institutions gathered to find out what they actually had gotten themselves into. It became apparent that many came with the idea that they would be presented with an array of model programs; they expected to look over this menu, make their selections, and take a proposed program back to their schools for debate and speedy approval. The staff at that opening event made it clear that this was not the way they conceived the task. The central actors in this drama were the participants who were urged to develop their own "home grown" program with the advice and support of the workshop and Project staff. Like the person who expects a psychiatrist to cure his problems, some thought we were incompetent because we couldn't offer them a "quick fix" for their general education needs; others were angry because they thought we wouldn't provide ready-made solutions. It is curious that within the year some of these same participants were on a panel at a professional meeting and were asked by members of the audience for models they could

take back to their campuses. To a person the GEM task force presenters voiced that this is a wrong-headed notion, that a program should be designed around the character of their own institutions, the strengths and interests of their faculty, and the needs of their students.

2. Expect a holistic change. Some people approach a curricular reform assignment with apocalyptic notions: they expect to fashion a comprehensive curricular program that is to be introduced at a single point in time to produce revolutionary change. Despite such grandiose ambitions, the fact is that radical departures from established traditions are very rare in the history of American higher education. They have occurred, but usually as a result of the creation of a new institution, as with Empire State or Evergreen State Colleges in the 1960's. Crisis conditions sometimes have forced radical change, for instance, at Antioch College in 1919, and charismatic individuals, such as Hutchins at the University of Chicago, have sometimes fashioned distinctive programs. But as Hefferlin (1969) documented, most changes are evolutionary and introduced in a piecemeal fashion or phased in over a period of time. Furthermore, the holistic approach is a very high risk strategy. It takes a group enormous amounts of time to fashion a comprehensive proposal, yet a faculty can turn it down in a single meeting, thereby aborting the entire effort. A more differentiated proposal developed out of an evolutionary framework has a greater chance of having at least a portion of it accepted. A footnote in the Carnegie Foundation report (1977, p. 16) declared, "Curricular reform of significance requires 1) overall thought but 2) piecemeal action." Several committees which have seen their proposals rejected can attest to the practical wisdom of this strategy.

3. Reinstate distribution requirements. Amid the current debate about general education, two schools of thought stand out. One school seeks to reinstate conventional distribution requirements, which consist largely of introductions to traditional liberal arts disciplines usually taught by standard lecture or seminar methods. This approach may, indeed, represent an improvement in the general education of students at some institutions, but it carries three major limitations. First, it is the

one model of education with which we have had extensive experience; according to Levine (1978, p. 11) approximately 85 percent of all colleges and universities operate with a distribution system. Yet, it has spawned the very problems that the current efforts are seeking to overcome: the fragmentation of the curriculum; the erosion of an accepted educational rationale; the lack of commitment on the part of the faculty; the loss of interest by students; and the absence of any central administration or supervision of the program. Second, breadth of knowledge is only one part of what most people think of as general education. The Carnegie Foundation report (1977), for instance, cited learning skills such as communication, mathematics, statistics, and possibly a foreign language as a second component, and various forms of integrative learning across the various disciplines as a third component. Neither of these other two components is well served by the distribution requirements. Finally, it represents a return to earlier forms of general education that may be inappropriate today. However useful such forms may have been during earlier periods, they may be maladapted to a student clientele that consists of far more adult, under-prepared, minority, women, and other "non-traditional" students. Further, such a pattern has stressed Western civilization, and it is necessary today to transcend the narrow categories of this one tradition, however important it has been, and incorporate more non-Western perspectives and knowledge. Lockwood (1978, p. 1) has expressed his skepticism about this approach:

> The current trend at colleges of reviving distribution requirements does not convince me that we are improving the quality of education. Giving the curriculum more structure doesn't necessarily give it coherence. I am skeptical that meaningful educational reform can occur if it is not based on a new philosophy of education and shared assumptions by faculty members of what education should be in the last quarter of the twentieth century.

Rather than merely reviving distribution requirements, Project GEM has sought to develop the philosophies of which Lockwood spoke on different member campuses as a basis for building contemporary programs of general education. Many different steps are being taken to rebuild this central part of the undergraduate program at the various schools. This approach seems to be a way of providing a sounder long-term

basis for any specific reform.

Task Force Procedures

4. Work through the curriculum committee. It is reasonable that a curricular review or reform should be carried out under the authority of the standing committee responsible for this area. However, there are reasons to think that forming a special task force for this specific purpose might be a better route to take. At standing committee has its regular business to conduct, which has a way of consuming large amounts of available time, while a task force can devote all of its energy to a single-minded purpose. A committee has provisions for regularly changing membership, and more than one group has found that new members can sidetrack its work by reintroducing issues and arguments that had been settled earlier. Furthermore, curriculum committees traditionally are reactive to proposals of faculty members or departments and operate with a veto power mentality. Efforts to reconstruct general education typically require a group to be proactive and help mobilize campus support for their ideas. This is one reason why Hefferlin has called curriculum committees "the burying ground of proposals for educational reform."

5. Assemble the best thinkers. It is common sense that the best thinkers on the faculty should be assembled to prepare the best possible proposal. In practice, however, this approach may generate heady debate about high principles but it spins wheels in regard to action. Robert Chambers, the Dean of the College of Arts and Sciences at Bucknell University lamented, "I'm afraid we will spend three years talking about change rather than doing it." When asked who on the committee were the "doers" (as opposed to the thinkers), the members looked around the table in vain. A good task force needs various kinds of talent--thinkers and doers, idealists and pragmatists, educational innovators and conservatives, campus politicians and those connected with national trends and resources. Failure to include a mix of individuals may re-

sult in more progress reports like the one issued by Richard Clinton of Oregon State University, "When all is said and done, more is said than done." Furthermore, Project GEM task forces are required to include more than faculty. Guidelines specify that each task force should have five to seven faculty members to provide faculty leadership, an administrator to provide institutional support, and three to five students to remind all that they are the ultimate beneficiaries of the curriculum. We believe that each of these constituencies has a legitimate interest in the quality of general education, and each should be represented in the renewal process.

6. Work without any special institutional support. It is amazing how many committees try to effect massive curricular reform out of their hip pockets. Of course, this frequently occurs if the task is given over to a standing committee, since such committees seldom receive any special budget or other assistance. Institutions that comprise Project GEM were required to provide three kinds of support for their task forces. First, released time from teaching assignments for faculty was deemed essential if they were to have the time and energy to provide leadership for the curricular revision; in some cases a half-time reduction was provided for the chairperson, and in others this amount of time, and in some instances more, was distributed among several members. Similarly, schools were urged to either pay students with work-study funds or structure matters so that students could earn academic credit for their involvement. Second, schools were expected to pay travel costs to send their people to Project-wide meetings. Finally, each task force needed a modest fund to purchase materials, hold retreats, invite consultants, reproduce papers for campus distribution, and the like. Some funds were provided by the Project, but usually these were supplemented by the institutions. The point is that unless there is adequate support for a group, it cannot be expected to provide creative and effective leadership for curricular renewal.

7. Plan for a short term project. Many committee members assume that their work will span only a few months, but then they become frustrated and disappointed to see that the task extends well beyond this time frame. Harvard University, which in

many ways surfaced the current national debate, provides a useful illustration. It was in 1974 when a group was first assembled to address the question of the quality of undergraduate education at Harvard. A report of the Task Force on the Core Curriculum was issued in 1977, when the faculty approved it in principle. In 1978 a more detailed proposal was presented and approved. Subsequently, a standing committee to oversee this part of the curriculum was established, specific course proposals were solicited from the faculty, and these were negotiated. It will be 1982 before the program is fully operational, a full eight years after the dialogue first began. Committes would do well to keep in mind the dieters' dictum: fat that took years to put on cannot be removed in a few days. The difficulties that surround undergraduate general education are so severe and deep-seated that they cannot be resolved overnight. Time, more than usually anticipated, is needed to rectify the situation.

8. Have the committee work by itself to develop a proposal. The basic rationale for committees is that a small group can probe a subject in depth, issue a report, and have the larger group make an informed decision without investing all of the time of the small group. This logic has led some committees to work in isolation, survey the state of the art around the country, examine alternative forms of general education, and issue a report to the faculty at large. Such reports frequently are perceived by the faculty to come out of the blue, the committee is charged with secretive discussions, and the faculty feels that its perogative to be actively involved in curricular policy-making has been ignored. This very procedure was followed by a summer planning group of faculty at Eckerd College, and the rest of the faculty killed the report without its ever being submitted to a formal vote. Today a reconstituted committee has been assembled. It spent a great deal of time at the outset outlining a procedure for involving the entire faculty. It is now engaged in a number of institution-wide activities, such as a monthly colloquium on general education, to prepare a proposal that has a better chance of winning widespread support.

9. Issue a single final report. When writing scholarly papers, academics typically wait until their ideas are fully developed and well expressed before submitting them for publication or the critical scrutiny of their colleagues. This common sense approach to the preparation of a curriculum proposal can be catastrophic. One institution had a committee working laboriously for two years to develop an elegant and comprehensive proposal. This lengthy document was impressive in its philosophy of education, analysis of the institution, and number of recommendations, but unfortunately it contained something for everyone to dislike. It was defeated by a coalition of opposition. Other groups are finding it more successful to issue a progressive series of reports, to hold discussions of each along the way, and to seek approval of portions as the enterprise unfolds. For example, several schools have sought and obtained some consensus on learning goals for students. A set of assumptions about general education was developed and debated at Valparaiso University before a specific program was developed. A framework for the curriculum was presented for discussion and approval at the Community College of Denver before specific courses and other details were fleshed out. Such a procedure has the advantage of bringing the faculty along with the committee as it progresses with its task.

10. Critically analyze the "big issues." One of the things that sidetracks task forces is debate over large and enduring issues, such as the plight of undergraduate education, the lack of interest in teaching among faculty, the inadequacy of faculty preparation for teaching, or the absence of professional incentives for teaching in general education. These are important and legitimate issues, and they deserve a portion of any group's time. But often a committee can be stymied for inordinate amounts of time by hand-wringing about these matters over which it has little control. Productive reform groups tend to take a practical stance and focus on "what we can do here using our own resources" as a way to bring abstract issues down to earth. The large-scale changes toward competency-based ucrricula at Alverno and Mars Hill Colleges were effected because leaders of those renewal efforts kept this practical focus on

their agendas.

Concepts of General Education

Another set of potholes surround the meaning of general education. As members of a task force discuss issues and ideas, tentative understandings and agreements may slip into disagreements as they unearth underlying assumptions and values that are implied in various concepts of general education. A few of the most important of these are discussed below.

11. There is only one true meaning of general education. This is a serious chuckhole that is encountered at the beginning of the journey, as committee members tend to vest their own parochial definitions with unmerited authority. Naturally, these different concepts, strongly held, can lead to disagreements and even conflicts. After spending some time hearing various members articulate their own views over and over again, some individuals lament that the group cannot even agree on the meaning of general education let alone ways to strengthen it. Eventually the curriculum committee may come to realize that general education is fraught with meaning, that there are several definitions of this concept, and that each person has a legitimate claim to his or her view. When this occurs, the committee can adopt a provisional definition, attempt to explore and elaborate its meaning as work progresses, and seek to understand the bases of various meanings of the term. Typically, the committee will have a richer sense of this central concept at the conclusion of their efforts rather than at the outset.

12. General education deals only with breadth of knowledge, as in a "broad general education." This is a common presupposition that tends to be associated with the notion that students should be introduced to an array of basic academic disciplines. While few would dispute the contention that breadth of knowledge is part of general education, there is reason to resist the claim that this is all. The helpful Carnegie typology included learning skills and integration of knowledge as important components as well as breadth. As soon as the committee learns to substitute a de-

finition for the definition of general education, it is free to consider various ways to enhance this part of the curriculum. Indeed, some thinkers (Boyer and Kaplan 1977) argue that a core curriculum based on common needs, concerns, or themes which take the form of interdisciplinary courses is a more productive approach than the distribution pattern.

13. General education is only cognitive in character. The starting place for many faculty members is to ask the perfectly reasonable question of what knowledge a generally educated person ought to have. From this they are led into a consideration of which disciplines are most basic or important. Naturally, this logic leads directly to legendary battles over "turf." Certain committees have found that by starting at a prior point they can avoid a few of these difficulties. Some,therefore, seek to identify qualities, not exclusively cognitive knowledge, that are the marks of a generally educated person. Northeastern Illinois University, for instance, developed a list of desireable qualities of a generally educated student, and the higher ranking features included effective communication skills, critical thinking abilities, problem-definition and solving skills, human relations competencies, and commitment to such ideals as truth and social justice. As is evident from these few items, many affective, attitudinal, value, and skill dimensions are regarded as part of general education, and these qualities can be mixed into the pot with all of the cognitive knowledge goals. The more purely knowledge-oriented goals, however important they are, are then only some of the qualities of an educated person. This formulation helps to defuse the potentially explosive issue of turf and poses the questions of how these other qualities can be taught and who is responsible for teaching them.

14. A program of general education is only curricular. Again, if one starts with the question of what knowledge a student should possess, that implies an answer that is essentially curricular in nature--so many courses in this area and so many in that. However, once the question is expanded to the qualities of an educated pers and includes a broader array of qualities, then there is a concern about how best to teach these traits. Although much can be taught through the curriculum, attitudes toward knowledge, relationships with others, and awareness of one's values may be better

taught through the college community, dormitory life, informal relationships with faculty and students outside of class, or off-campus experiences. Several institutions are seeking to enrich the curricular offerings and embed them within a larger community of learners.

15. The liberal arts comprise the rank and file defenders of general education. It is a common myth that the liberal arts are beleaguered defenders of culture and general education against the infidels in the professional and practical arts. But these categories are being turned topsy turvey by recent events. The Faculty Director, Undergraduate Programs, Department of Business Administration at Pennsylvania State University (Coyle, 1979) reported that enrollments in his school are mushrooming not just because of the increase in majors but also because larger numbers of students in arts and sciences fields want to take courses in business. His school is called upon to provide "service" courses to the College of Liberal Arts, reversing the former relationship. Furthermore, he worries that the students are taking narrowly specialized courses designed for management majors and that these electives do not form a coherent program. He would like to design a few "minors" around the special needs and interests of students with different majors in the liberal arts. At Valparaiso University the task force encountered some opposition to its proposals in the professional schools, but on closer inspection it turned out that at least some of the concern stemmed not from narrow specialization. The nursing department, for instance, requires relatively few nursing courses, but does require several cognate courses, for example in biology and chemistry. Furthermore, the national accrediting association is so concerned that the baccalaureate nursing students get a general education that they specify general education requirements. A nursing student, therefore, is required to take several liberal arts courses. It is this combination of major, cognate, and general education requirements that packs a nursing student's program so tightly. In other contexts, committees sometimes have discovered that they enjoy more support for general education proposals from professional schools than from the supposedly amenable liberal arts departments.

16. The humanists are the true defenders of general education. This is a variation on the above theme, with the scientists identified as the opponents of genuine culture. The General Education Committee at the State University of New York at Buffalo conducted a study that led to different conclusions.

> Overspecialization is a fault usually associated with the rigorous requirements of vocational or pre-professional majors, and the decline of general education is presumed to relate to the increasing proportions of students seeking such majors. Yet it appears from statistics recently generated by the General Education Committee at SUNYAB that students majoring in other areas, particularly the humanities, are as likely to avoid certain major knowledge areas and thus leave the quality of their general education open to question. In the fall of 1977, English majors at SUNYAB took only 3.5% of their courses in Natural Sciences, Mathematics, Health Sciences, or Engineering. This matches, almost exactly, the proportion of Engineering students taking courses in Arts and Letters and is significantly less than the comparable figures for students in Health Science and Management majors.

Rather than polarizing the faculty by pointing fingers at some segments which wear white hats and others with black ones, many committees have found it more productive to assume that general education is a problem that plagues all fields of s and all types of students. This allows them to consider how faculty from all fields can improve their offerings.

17. Integration is the responsibility of students. Nearly everyone agrees that students should not merely master discrete bits of knowledge but that these items should be integrated within the mental apparatus of individual students. But some are content to leave the full responsibility to students. Jonathan Smith, Dean of the College at the University of Chicago has declared an "iron law" on this matter: "Students shall not be expected to integrate anything the faculty can't or won't." The rationale is that the integration is not likely to occur unless it is consciously planned and structured as a regular part of the academic program. Such a principle rigorously applied means that faculty from different academic disciplines must engage in dialogue over substantive issues, and take the lead in building an academic community to sustain their general education program. Lockwood (1978, pp. 1-2) again has expressed it well:

> For several decades--from the 1930's until the mid-50's--the general education movement represented much of what was best in undergraduate education. The late Lionel Trilling has recalled that for most of that period he and his colleagues, at Columbia and elsewhere, 'inhabited an academic community which was informed by a sense not merely of scholarly but of educational purpose and which was devoted to making ever more cogent its conception of what a liberal and humane education consists in. Does a similar sense of purpose, some shared conviction, characterize most current curricular reforms? I tend to doubt it.

Program Planning

Should a task force avoid the rough roadbed discussed above, it can expect to encounter difficulties in the area of planning a new program. A few of the major barriers are discussed below.

18. Change by addition. In recent decades academic change has been accomplished largely by adding new programs, securing larger budgets, recruiting more students, and hiring more instructors. Today this avenue is closed off at most institutions. Now programs are being introduced by shifting priorities, reallocating resources, reassigning faculty members, and developing the professional competence of existing personnel. This is a much more complicated route to reform than change by addition, but it is the only road available to most schools.

19. Keep the debate internal to the campus. Many committees begin their deliberations by having the members share their best thinking and offer their ideas for improving general education. This is guaranteed to pool a great deal of ignorance and half-truths, and it frequently results in premature polarization of the group. Other task forces have embarked on an exploration of the topic and consciously have cultivated a spirit of inquiry so that each person can learn to expand, refine, and alter his or her initial ideas. They read the literature, secure a consultant or two, attend a conference or workshop, or visit other institutions. The University of Tennessee committee is launching an extensive educational campaign by creating a series of faculty study groups and providing participants with a few key volumes to read and discuss. Specific proposals will not be pursued

until the faculty demonstates a higher level of sophistication on the topic of general education. Project GEM has prepared a guidebook about ideas, programs, and literature to help its task force members stretch their thinking and couch their work in the national context (Project on General Education Models, 1980).

20. Proposals are autobiographical. A frequent lament on the part of innovators is that faculty members offer ideas that are largely autobiographical, a tendency that can be intensified by the relative isolation of the group. Although proposals rooted in one's own personal experience frequently derive motivation from that very fact, there is a danger that faculty members will prescribe for today's students what was done for (or to) them in their own general education. Groups that encourage members to transcend their own experiences have a better chance of designing programs that are responsive to the interests of today's students and to contemporary realities.

21. Assume that the committee knows the experiences and views of relevant constituencies. Since members of the committee are from the campus, they are often presumed to be aware of the perspectives of the faculty and students. Others have found it instructive to conduct studies of various sorts to test some of their preconceived ideas, and sometimes, as with the SUNY-Buffalo example mentioned in item 16, reach surprising conclusions. The Rochester Institute of Technology has surveyed its students, faculty members, alumni, and members of the local community as an aid to its planning. Project GEM has utilized a survey of students and developed a faculty interview to assess these two key constitutencies.

22. Plan rationally. Various rational planning models are in existence, virtually all of which call for one to specify goals, assess needs, determine alternatives, design a program, implement, and evaluate outcomes. This is a useful formula, but in point of fact programs actually are fashioned in many different ways. The Community College of Denver was faced with the requirements of a new state law, and it devised a promising program in haste and with little help from a rational planning

model. Columbia University is building part of its program around people, rather than vice versa. They are creating a series of "teaching companies", upper division interdisciplinary study groups by getting faculty to identify common interests that transcend their disciplines and offering courses on such topics. Although the textbook approaches are useful, the examination of actual curricula indicates that there are many paths to the design of effective programs.

23. Use "either-or" thinking. Preliminary conversations often take the form of individuals advocating a pet idea and pitting it in opposition to another; some people regard peaceful coexistence of alternative ideas as anathema. However, general education is so complex that there are likely to be several steps that can be taken to strengthen it at most institutions. Some committees have discovered that thinking in terms of "both-and" allows many more features to be incorporated and avoids the political fallout of rejecting the polar alternatives. For instance, the Community College of Denver adopted a program that calls for all degree students to take four skills courses--communication, critical thinking, computational and interpersonal--and for students seeking an Associate of Arts Degree additionally take three disciplinary courses as well as three interdisciplinary courses. This scheme not only follows some of the most creative thinking done on the topic by the Carnegie Foundation but it also incorporates the desires of the group that demands attention to basic skills, the group that favors surveys of academic disciplines, and those who prefer some interdisciplinary mode of integration. A more sophisticated program and one with greater political support is possible by using the more complex though process.

24. Search for the "one best" program. Fred and Grace Hechinger in Growing Up in America (1975) traced a history of American education which analyzed the various trends and countertrends such as elitism and egalitarianism or integration and separatism. They concluded educators have a penchant for standardized answers to all problems and search for the "one best way"--this is responsible in large part for the educational fads that raged from one extreme to the other.

Many general education committees repeat this search without realizing that human diversity is such that any single program is bound to be a Procrustean bed. Some schools are seeking to avoid such rigidities by providing a good measure of freedom of choice for students. Some like Harvard provide a limited array of courses that can meet the specification of each required area of study. Others such as Spelman College are attempting to develop a series of interdisciplinary and thematic courses of study, and students select from these structured alternatives. Even more radical approaches include the creation of an alternative tightly integrated core curriculum at Pacific Lutheran University, a series of federated learning communities around thematic topics at SUNY-Stony Brook, and an alternative college at St. Olaf College. Each of these approaches is based on a healthy respect for common standards as well as an aversion to standardized solutions.

25. Keep the committee out of politics. The committee at Southern Illinois University, seeking to avoid partisanship within its own ranks, worked for many months guided by the rules of "objective scholarship," under which members were expected to keep their own personal biases out of the discussions. Their hope was that this technique would help prevent partisan political issues from arising within the committee and spreading throughout the campus. Other committees take the opposite tact and strive to uncover the personal views of various groups so that their biases can be explicitly incorporated into their proposals. This strategy involves consciously building coalitions and showing how the self-interest of various departments and other campus groups is served by the proposal.

26. Couch proposals in the language of innovation. Committee members think of themselves as being engaged in innovation or reform, and it is natural for them to use such language in their reports and written materials. Because this rhetoric may create resistance to change, some groups have chosen to heed the lesson cited by A. Lawrence Lowell in his 1938 book on What a University President Has Learned: "If he desires to innovate he will be greatly helped by having the reputation of

being conservative, because the radicals who want a change are little offended by the fact of change, while the conservatives will be likely to follow him because they look on him as sharing their temperament and point of view." Proposals couched in the guise of a return to fundamental purposes and procedures rather than a radical departure from present practices may draw support from both liberal and conservative campus.

27. Assume that the plan is the end of the process. As this lengthy list of difficulties implies, the process of planning a program is so demanding and time consuming that a planning committee is only too eager to complete this phase so that it can turn the responsibility for approving and implementing a program over to somebody else. The preparation of a plan that merits the support of the committee is seen as the end of a long haul. One institution dropped out of Project GEM in part because the committee had completed its report on the general education program and submitted it to the faculty. But as James Q. Wilson (1978), who chaired Harvard's task force, said after the faculty approved the new core curriculum, "To paraphrase Churchill, we are not at the end, or the beginning of the end, but at the end of the beginning." As will be seen in the next two sections, there is much yet to be done by a responsible committee to secure approval of its proposals and to assist with the implementation of a program.

Securing Approval of Proposals

28. Have the committee play a passive role in the debate and approval process. For reasons mentioned above, committees sometimes adopt the scholarly model of publishing their best thinking and waiting for the reviews and reactions from their professional colleagues to come in. It is essential, of course, for the faculty to have a full and fair debate of the issues, but several task forces have learned that they must take an active part in the debate and orchestrate the approval process if their proposals are to have any chance of passing. The role of the committee members may shift from that of a study and recommending body to that of an advocate for its own proposals. After all, if they don't speak for their own recommendations, who

will? The faculty in only a few months' time will have to process all of the issues, problems, recommendations, and rationales that the committee grappled with over perhaps a period of years. Members of the committee can greatly aid this process by initiating conversations with the key people--committee chairpersons, department chairpersons, faculty leaders, deans--at the proper time.

29. Present the proposal in an open hearing. The GEM task force at Northeastern Illinois University held a very productive two-day retreat in which they developed a set of goals, brainstormed some possible model curricula, and planned strategy. Toward the end of the retreat, one person suggested that they go back and hold an open hearing for interested faculty during which they would present their best thinking to their colleagues for a critique. Eventually someone remarked that their ideas had grown out of a constructive and enjoyable atmosphere of a retreat and expressed the fear that in an open hearing it would constitute a negative atmosphere in which faculty would criticize their best efforts. The decision was to try to recapture the spirit of the retreat by having small group meetings with numerous people back on the campus before attempting an open hearing. Although more time consuming, this technique did succeed in engaging more people in the constructive process of thinking about how to enhance the quality of general education and lay the groundwork for subsequent efforts.

30. Seek approval of a comprehensive proposal. As was discussed in item 9, a single comprehensive report can generate a coalition of opposition. But even a comprehensive report has a better chance of getting at least some of its recommendations accepted if it has several features that can be debated and acted upon separately. For instance, the College of Brockport in the SUNY system created the first college-wide Committee on General Education with specified membership and responsibilities before voting on the nature of the program. This procedure helped to settle some of the political ambiguities before the program itself was discussed. Other schools break down a comprehensive proposal and bring preliminary portions before the faculty

before proceding with subsequent elaboration.

31. Assume that the political task is to get others to accept the committee's proposal. Most committees get to the point at which they ask, "How can we get 'them' to approve 'our' recommendations?" When the question is posed in that way, it is very difficult to answer, because there is no way that faculty will vote for something that is not seen as desireable to them. The most reliable strategy is to make sure that the proposal contains portions that represent the ideas and values of those who must approve it. Spreading a sense of "ownership" in the document from the committee to the faculty is the key to gaining speedy and convincing support.

32. Avoid and isolate opponents. It is human nature to avoid those persons who disagree with one, and critics are often isolated and ignored. This does not make them go away, as some committees have learned; indeed, they may become more persistent and vocal. Others have deputized members or small delegations to meet quietly with these critics, hear their concerns, and either incorporate features that respond to their concerns or explain why that cannot be done. This procedure can sometimes improve the proposal as well as silence some of the opposition.

33. Assume that any opposition is irrational. Some committee members find it difficult to acknowledge that there may be good reasons why people oppose new policies to strengthen general education. However, many would-be supporters may actually have legitimate fears or concerns. Some groups have recognized the legitimacy of these anxieties and gone out of their way to reassure faculty members that their proposals to strengthen undergraduate general education, for example, are not antithetical to specialization, a threat to graduate education, contrary to the interests of departments, or a way to rid the institution of some faculty. Some reports have made it clear that not all faculty members would be involved in teaching new courses, and others have insisted that there would be resources to assist faculty in adjusting to new courses and a new program. These are understandable concerns of faculty, and some committees have found it useful to provide reassurance on these matters.

34. Assume that faculty understand the proposals. Faculty members are highly intelligent creatures, and one might naturally assume that they can write clearly and read effectively. Distribution of a written report and discussions are all essential in order to educate faculty about the proposed program. Yet, it is a rare vote that doesn't take place with at least some people misunderstanding portions of the report. Some opposition comes from simple misinformation about the current situation, the proposed improvement, the implications for others parts of the institution, and the like. One committee decided to do everything in its power to ensure that nobody was allowed to vote on the basis of misinformation. This means finding a way to have someone talk with known opponents, in particular, to make sure that they are genuinely in disagreement rather than merely misinformed.

35. Use regular voting procedures. It doesn't occur to some task forces to question the "business as usual" approach to voting on a major curriculum proposal. But the University of Tennessee adopted its current curriculum by a mailed secret ballot to minimize the oratorical influence of opponents in open faculty meetings and the undue influence which some persons might wield over others in a public vote. Because any curriculum should enjoy widespread support, some institutions are fearful of a 51-49 percent vote and require a stronger majority for passage. At the University of the Pacific the voting procedure was determined by a group other than the committee preparing the curriculum proposal. This body ruled that any non-vote would be treated as a no-vote; this made it necessary for the committee not only to convince the faculty of the merits of their proposal but also, like any political campaign, to get out the vote. The point is that there may very well be good reasons to depart from the usual procedures to decide on a major curriculum proposal.

36. Schedule a vote after a reasonable time for discussion. This, after all, is the sensible thing to do. However, after a task force spends years working on a proposal and holding extended discussions with the faculty, it is suicidal to schedule a definitive vote if the outcome is in doubt. Further discussion and

negotiation can keep the proposal alive for some time and perhaps win a few more adherents. The Machiavellian answer to the question of when to put the proposal to a vote is, "When the votes are assured."

37. Assume a negative vote is final. The final pothole that will be mentioned in this section--and it's a doozy--is interpreting a negative vote as the end of the road. The road to curriculum reform is strewn with abandoned vehicles that have fallen into this trap. The University of the Pacific committee found that its proposal was narrowly defeated in the college of liberal arts, where it was first acted upon. They immediately activated a contingency plan that involved three steps. First, the dean asked every department to state in writing specific problems with the document and specific ways it can be modified to meet their objections. Second, more members were added to the committee from the professional schools where there was more support for their recommendations. Finally, another vote was projected for the early fall, after additional work could be done. The group had met and worked on their plan for nearly three years, and they were not about to abort the effort when they were so near the end of the journey.

Implementing a Program

38. Have the task force issue a report for others to implement. It is typical for a faculty committee to issue a report, and if its recommendations are accepted, an administrator is given the responsibility of carrying out the new policies. With curricular revisions, however, it is important that there be some continuity between the planners and the implementers, and it is common for at least some members of the planning group to play central roles in implementing the program. Eva Wanton, the chairperson of the GEM task force at Florida A&M University, for example, was asked to serve as the director of the new General Education Program which her group had developed. Further, several members of committees frequently end up teaching courses in the new program and helping to secure colleagues to teach with them.

In short, several have found that the program operates best when its framers help translate their visions into reality by taking an active part in the actual implementation.

39. Assume that faculty are willing to teach in the program. It is easy to assume that if a faculty passes a new program that they therefore are willing to teach in it. But that does not necessarily follow. The SUNY College at Brockport program called for a freshman course entitled Dimensions of Liberal Education to be offered to all entering freshmen. A total of nearly 70 sections were planned, so that each section would be small enough for personal interaction and discussion. A major concern was to attract enough faculty members to staff this course, which is but one part of their overall program. Some rewards are necessary to attract and retain faculty. Often the opportunity to learn a new subject, to teach in a new context, or to work with stimulating new colleagues is seen as a stimulus to growth and renewal and will suffice to lure faculty members. But sometimes material rewards, or at the very least, assurance that this kind of teaching will not be held against one in decisions about salary, retention, and promotion, is necessary.

40. Assume that anybody can teach general education courses. Courses that stress skills rather than content, that range beyond disciplinary boundaries, or that deal with value implications of knowledge pose challenges to any teacher, and they are especially difficult for teachers cut out of a more traditional mold. Several institutions have found it necessary to make provisions for the development of the faculty to teach in these kinds of circumstances. Pacific Lutheran University, for example, held intensive workshops for the faculty teaching in their Integrated Studies Program, an alternative to the standard core curriculum. Team teaching and periodic meetings of faculty throughout the term also helped professors to integrate their material so as to provide more coherence in the education of students.

41. Implement the entire program at once. Some committees expect that once the program is approved, that it can be implemented in one fell swoop. Ohio University is phasing in its new program with several positive results. According to Dean

William Dorrill it is easier to secure the necessary personnel, it is less disruptive to the rest of the instructional program, and it identifies problems that can be dealt with on a small scale before the entire program is in place. Other schools, such as Bucknell University, have opted for a pilot program involving a few faculty and students before making a course or an entire program fully operational.

42. Expect the program to work well the first time. After so much time and energy has been invested in developing a new curriculum, it is natural for individuals to have high expectations, but often these are too high. One doesn't have to accept Murphey's Law that "If something can go wrong, it will," in order to realize that any new program will encounter some difficulties. Personnel problems, misunderstandings, personality conflicts, logistics, and other foul-ups cannot all be avoided, even with the best of advanced planning. The first time courses, programs, or services are offered, even if on a permanent basis, program implementers might aid their mental health by conceiving them as a trial run with the goal of improving the operation on succeeding trials.

43. Evaluation is unnecessary. By the time a committee travels this far it will look for any excuse to stop its work. Evaluation may be regarded as a dispensible burden, an esoteric exercise of some arcane specialty, or the reduction of grand purposes and aspirations to mere numbers; and, anyway, "we" will know if the program is working or not. But a careful study of the program, reaction of the students, teaching effectiveness of the faculty, and the like--particularly if it is focused on identifying problem areas that can be corrected during subsequent rounds--can serve as a significant aid to the program implementation. It is one means to provide continual monitoring of the general education of students. What is more, there are political points to be gained. As one person put it, "If we conduct an evaluation of our program, they won't be able to get us on that one."

Conclusion

The large number of alternative strategies listed above may lead to misinter-

pretation. In this conclusion, a few basic ideas that underlie this paper should be reiterated. First, one should expect potholes in the difficult and complicated task of reconstructing the general education program of a college or university. The current disarray in this area of study exists largely because there is not agreement to do anything else, and the difficulty of securing agreement for change among faculty who are trained to "think otherwise" cannot be overestimated. Second, nobody piloting a curriculum proposal down the road toward approval can expect to miss all of the holes in the road. Even the best driver is jarred occasionally. Third, hitting a hole or two can slow the pace, but it will seldom knock the vehicle off the course. One simply needs to slow down and become more vigilent in the future. But--and this is the fourth point--falling into too many of the confounded things can lead people to take another road altogether. The entire journey can be abandoned if care is not taken. Further, alternative routes can be bumpy, too. It may turn out that the best direction is the original one rather than the alternative that is considered.

All of this having been said, it must be acknowledged that avoiding potholes is an art; it involves some luck, but one's skill can be improved. Some committees have learned the hard way that it pays to attend to the process of curricular change as well as to its substance, and the points made here may help fellow travelers to profit from their experiences.

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